Supporting Documents for Criterion 1.2.1

Annexure 3 of Criterion 1.2.1: CBCS Course Description

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Choice Based Credit System (CBCS)

University of Delhi

DEPARTMENT OF ECONOMICS

UNDERGRADUATE PROGRAMME
(Courses effective from Academic Year 2015-16)

SYLLABUS OF COURSES TO BE OFFERED
Core Courses, Elective Courses & Ability Enhancement Courses

Preamble

The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education System of country. The important measures taken to enhance academic standards and quality in higher education include innovation and improvements in curriculum, teaching-learning process, examination and evaluation systems, besides governance and other matters.

The UGC has formulated various regulations and guidelines from time to time to improve the higher education system and maintain minimum standards and quality across the Higher Educational Institutions (HEIs) in India. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the higher education system. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system. While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching–learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. Presently the performance of the students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated these guidelines.

CHOICE BASED CREDIT SYSTEM (CBCS):

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the UGC has formulated the guidelines to be followed.

Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
2. **Elective Course:** Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.
    2.1 Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).
    2.2 Dissertation/Project: An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.
    2.3 Generic Elective (GE) Course: An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.
    P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.
3. **Ability Enhancement Courses (AEC)/Competency Improvement Courses/Skill Development Courses/Foundation Course:** The Ability Enhancement (AE) Courses may be of two kinds: AE Compulsory Course (AECC) and AE Elective Course (AEEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement. They ((i) Environmental Science, (ii) English/MIL Communication) are mandatory for all disciplines. AEEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.
    3.1 AE Compulsory Course (AECC): Environmental Science, English Communication/MIL Communication.
    3.2 AE Elective Course (AEEC): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based instruction.

Project work/Dissertation is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

Details of courses under B.A (Honors), B.Com (Honors) & B.Sc. (Honors)

Course	*Credits	
	Theory+ Practical	Theory + Tutorial

==

I. Core Course

(14 Papers)	14X4= 56	14X5=70

Core Course Practical / Tutorial*

(14 Papers)	14X2=28	14X1=14

II. Elective Course

(8 Papers)

A.1. Discipline Specific Elective	4X4=16	4X5=20

(4 Papers)

A.2. Discipline Specific Elective

Practical/ Tutorial*	4 X 2=8	4X1=4

(4 Papers)

B.1. Generic Elective/

Interdisciplinary	4X4=16	4X5=20

(4 Papers)

B.2. Generic Elective

Practical/ Tutorial*	4 X 2=8	4X1=4

(4 Papers)

- **Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester**

III. Ability Enhancement Courses

1. **Ability Enhancement Compulsory**

(2 Papers of 2 credit each)	2 X 2=4	2 X 2=4

    Environmental Science

    English/MIL Communication

2. **Ability Enhancement Elective** (Skill Based)

(Minimum 2)	2 X 2=4	2 X 2=4

(2 Papers of 2 credit each)

        _____   _____

Total credit	**140**	**140**

Institute should evolve a system/policy about ECA/ General Interest/Hobby/Sports/NCC/NSS/related courses on its own.

* wherever there is a practical there will be no tutorial and vice-versa

Course Structure for B.A. (Hons.) Economics

Semester-I	Semester-II
Economics Core Course 1 : Introductory Microeconomics	**Economics Core Course 3 : Introductory Macroeconomics**
Economics Core Course 2 : Mathematical Methods for Economics-I	**Economics Core Course 4 : Mathematical Methods for Economics-II**
Ability Enhancement Compulsory Course (AECC)-I	**Ability Enhancement Compulsory Course (AECC)-II**
Generic Elective (GE) Course-I	**Generic Elective (GE) Course-II**

Semester-III	Semester-IV
Economics Core Course 5 : Intermediate Microeconomics-I	**Economics Core Course 8 : Intermediate Microeconomics-II**
Economics Core Course 6 : Intermediate Macroeconomics-I	**Economics Core Course 9 : Intermediate Macroeconomics-II**
Economics Core Course 7 : Statistical Methods for Economics	**Economics Core Course 10 : Introductory Econometrics**
Skill Enhancement Course (SEC)-I	**Skill Enhancement Course (SEC)-II**
Generic Elective (GE) Course-III	**Generic Elective (GE) Course-IV**

Semester-V	Semester-VI
Economics Core Course 11 : Indian Economy-I	**Economics Core Course 13 : Indian Economy-II**
Economics Core Course 12 : Development Economics-I	**Economics Core Course 14 : Development Economics-II**
Discipline Specific Elective (DSE) Course-I (From List of Group-I)	**Discipline Specific Elective (DSE) Course-III (From List of Group-II)**
Discipline Specific Elective (DSE) Course-II (From List of Group-I)	**Discipline Specific Elective (DSE) Course-IV (From List of Group-II)**
Group-I (Discipline Specific Elective (DSE) Courses)	**Group-II (Discipline Specific Elective (DSE) Courses)**
(i) Economics of Health and Education	**(viii) Political Economy-II**
(ii) Applied Econometrics	**(ix) Comparative Economic Development (1850-1950)**
(iii) Economic History of India (1857-1947)	**(x) Financial Economics**
(iv) Topics in Microeconomics-I	**(xi) Topics in Microeconomics-II**
(v) Political Economy-I	**(xii) Environmental Economics**
(vi) Money and Financial Markets	**(xiii) International Economics**
(vii) Public Economics	**(xiv) Dissertation/Project**

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Core Economics Course 1: INTRODUCTORY MICROECONOMICS

Course Description

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Outline

1. Exploring the subject matter of Economics

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs.

2. Supply and Demand: How Markets Work, Markets and Welfare

Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

3. The Households

The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision - choice between leisure and consumption.

4. The Firm and Perfect Market Structure

Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run.

5. Imperfect Market Structure

Monopoly and anti-trust policy; government policies towards competition; imperfect competition.

6. Input Markets

Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.

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Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

Core Economics Course 2: MATHEMATICAL METHODS IN ECONOMICS–I

Course Description

This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Course Outline

1. Preliminaries
Logic and proof techniques; sets and set operations; relations; functions and their properties; number systems.

2. Functions of one real variable
Graphs; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; sequences and series: convergence, algebraic properties and applications; continuous functions: characterizations, properties with respect to various operations and applications; differentiable functions: characterizations, properties with respect to various operations and applications; second and higher order derivatives: properties and applications.

3. Single-variable optimization
Geometric properties of functions: convex functions, their characterizations and applications; local and global optima: geometric characterizations, characterizations using calculus and applications.

4. Integration of functions

5. Difference equations

Readings:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

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Core Economics Course 3: INTRODUCTORY MACROECONOMICS

Course Description

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Course Outline

1. Introduction to Macroeconomics and National Income Accounting
Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy; balance of payments: current and capital accounts.

2. Money
Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy.

3. Inflation
Inflation and its social costs; hyperinflation.

4. The Closed Economy in the Short Run
Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary multipliers.

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics,* Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Core Economics Course 4: MATHEMATICAL METHODS IN ECONOMICS - II

Course Description

This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Course Outline

1. Differential equations

2. Linear algebra
Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; linear transformations: properties, matrix representations and elementary operations; systems of linear equations: properties of their solution sets; determinants: characterization, properties and applications.

3. Functions of several real variables
Geometric representations: graphs and level curves; differentiable functions: characterizations, properties with respect to various operations and applications; second order derivatives: properties and applications; the implicit function theorem, and application to comparative statics problems; homogeneous and homothetic functions: characterizations and applications.

4. Multi-variable optimization
Convex sets; geometric properties of functions: convex functions, their characterizations, properties and applications; further geometric properties of functions: quasiconvex functions, their characterizations, properties and applications; unconstrained optimization: geometric characterizations, characterizations using calculus and applications; constrained optimization with equality constraints: geometric characterizations, lagrange characterization using calculus and applications; properties of value function: envelope theorem and applications.

Readings:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

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Core Economics Course 5: INTERMEDIATE MICROECONOMICS - I

Course Description

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

Course Outline

1. Consumer Theory
Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; choice under risk and intertemporal choice; revealed preference.

2. Production, Costs and Perfect Competition
Technology; isoquants; production with one and more variable inputs; returns to scale; short run and long run costs; cost curves in the short run and long run; review of perfect competition.

Readings:

1. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics,* Cengage Learning (India), 2010.
3. B. Douglas Bernheim and Michael D. Whinston, *Microeconomics,* Tata McGraw-Hill (India), 2009.

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Core Economics Course 6: INTERMEDIATE MACROECONOMICS - I

Course Description

This course introduces the students to formal modeling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.

Course Outline

1. Aggregate Demand and Aggregate Supply Curves
Derivation of aggregate demand and aggregate and supply curves; interaction of aggregate demand and supply.

2. Inflation, Unemployment and Expectations
Phillips curve; adaptive and rational expectations; policy ineffectiveness debate.

3. Open Economy Models
Short-run open economy models; Mundell-Fleming model; exchange rate determination; purchasing power parity; asset market approach; Dornbusch's overshooting model; monetary approach to balance of payments; international financial markets.

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics,* Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Steven M. Sheffrin, *Rational Expectations*, Cambridge University Press, 2nd edition, 1996.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Course Description

This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.

Course Outline

1. Introduction and Overview
The distinction between populations and samples and between population parameters and sample statistics; the use of measures of location and variation to describe and summarize data; population moments and their sample counterparts.

2. Elementary Probability Theory
Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Bayes' rule; independence.

3. Random Variables and Probability Distributions
Defining random variables; probability distributions; expected values of random variables and of functions of random variables; properties of commonly used discrete and continuous distributions (uniform, binomial, normal, poisson and exponential random variables).

4. Random Sampling and Jointly Distributed Random Variables
Density and distribution functions for jointly distributed random variables; computing expected values; covariance and correlation coefficients.

5. Sampling
Principal steps in a sample survey; methods of sampling; the role of sampling theory; properties of random samples.

6. Point and Interval Estimation
Estimation of population parameters using methods of moments and maximum likelihood procedures; properties of estimators; confidence intervals for population parameters.

Readings:

1. Jay L. Devore, *Probability and Statistics for Engineers,* Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics*

and its Applications, Prentice Hall, 2011.
4. William G. Cochran, *Sampling Techniques,* John Wiley, 2007.

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Core Economics Course 8: INTERMEDIATE MICROECONOMICS - II

Course Description

This course is a sequel to Intermediate Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.

Course Outline

1. General Equilibrium, Efficiency and Welfare
Equilibrium and efficiency under pure exchange and production; overall efficiency and welfare economics.

2. Market Structure and Game Theory
Monopoly; pricing with market power; price discrimination; peak-load pricing; two-part tariff; monopolistic competition and oligopoly; game theory and competitive strategy.

3. Market Failure
Externalities; public goods and markets with asymmetric information.

Readings:

1. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, 8th edition, W.W. Norton and Company/Affiliated East-West Press (India), 2010.The workbook by Varian and Bergstrom could be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics,* Cengage Learning (India), 2010.

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Core Economics Course 9: INTERMEDIATE MACROECONOMICS - II

Course Description

This course is a sequel to Intermediate Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

Course Outline

1. Economic Growth
Harrod-Domar model; Solow model; golden rule; technological progress and elements of endogenous growth.

2. Microeconomic Foundations

a. Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses; rational expectations and random-walk of consumption expenditure.

b. Investment: determinants of business fixed investment; residential investment and inventory investment.

c. Demand for money.

3. Fiscal and Monetary Policy
Active or passive; monetary policy objectives and targets; rules versus discretion: time consistency; the government budget constraint; government debt and Ricardian equivalence.

4. Schools of Macroeconomic Thoughts
Classicals; Keynesians; New-Classicals and New-Keynesians.

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics,* Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Charles I. Jones, *Introduction to Economic Growth***,** W.W. Norton & Company, 2nd edition, 2002.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol. D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011.

Core Economics Course 10: INTRODUCTORY ECONOMETRICS

Course Description

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.

Course Outline

1. Nature and Scope of Econometrics

2. Statistical Concepts

Normal distribution; chi-sq, t- and F-distributions; estimation of parameters; properties of estimators; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test; tests for comparing parameters from two samples.

3. Simple Linear Regression Model: Two Variable Case
Estimation of model by method of ordinary least squares; properties of estimators; goodness of fit; tests of hypotheses; scaling and units of measurement; confidence intervals; Gauss-Markov theorem; forecasting.

4. Multiple Linear Regression Model
Estimation of parameters; properties of OLS estimators; goodness of fit - R^2 and adjusted R^2; partial regression coefficients; testing hypotheses – individual and joint**;** functional forms of regression models; qualitative (dummy) independent variables.

5. Violations of Classical Assumptions: Consequences, Detection and Remedies
Multicollinearity; heteroscedasticity; serial correlation.

6. Specification Analysis
Omission of a relevant variable; inclusion of irrelevant variable; tests of specification errors.

Readings

1. Jay L. Devore, *Probability and Statistics for Engineers,* Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications,* Prentice Hall, 2011.
4. D. N. Gujarati and D.C. Porter, *Essentials of Econometrics,* McGraw Hill, 4th edition, International Edition, 2009.
5. Christopher Dougherty, *Introduction to Econometrics*, Oxford University Press, 3rd edition, Indian edition, 2007.

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6. Jan Kmenta, *Elements of Econometrics*, Indian Reprint, Khosla Publishing House, 2nd edition, 2008.

Course Description

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

Course Outline

1. Economic Development since Independence
Major features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

2. Population and Human Development
Demographic trends and issues; education; health and malnutrition.

3. Growth and Distribution
Trends and policies in poverty; inequality and unemployment.

4. **International Comparisons**

Readings:

1. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
3. Rakesh Mohan, 2008, ‒Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.
4. S.L. Shetty, 2007, ‒India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development.*
5. Himanshu, 2010, Towards New Poverty Lines for India, *Economic and Political Weekly*, January.
6. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Intepretations, *Economic and Political Weekly*, February.
7. Himanshu. 2011, ‒Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.
8. Rama Baru et al, 2010, ‒Inequities in Access to Health Services in India: Caste, Class and Region, *Economic and Political Weekly*, September.
9. Geeta G. Kingdon, 2007, ‒The Progress of School Education in India, *Oxford Review of Economic Policy.*

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10. J.B.G. Tilak, 2007, ‒Post Elementary Education, Poverty and Development in India, *International Journal of Educational Development.*
11. T. Dyson, 2008, ‒India's Demographic Transition and its Consequences for Development‖ in Uma Kapila, editor, *Indian Economy Since Independence*, 19th edition, Academic Foundation.
12. Kaushik Basu, 2009, ‒China and India: Idiosyncratic Paths to High Growth‚ *Economic and Political Weekly*, September.
13. K. James, 2008, ‒Glorifying Malthus: Current Debate on Demographic Dividend in India‖ *Economic and Political Weekly*, June.
14. Reetika Khera, 2011, ‒India's Public Distribution System: Utilisation and Impact *Journal of Development Studies*.
15. Aniruddha Krishna and Devendra Bajpai, 2011, ‒Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, *Economic and Political Weekly*, September.
16. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics*, Oxford University Press.

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Core Economics Course 12: DEVELOPMENT ECONOMICS-I

Course Description

This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.

Course Outline

1. Conceptions of Development
Alternative measures of development, documenting the international variation in these measures, comparing development trajectories across nations and within them.

2. Growth Models and Empirics
The Harrod-Domar model, the Solow model and its variants, endogenous growth models and evidence on the determinants of growth.

3. Poverty and Inequality: Definitions, Measures and Mechanisms
Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; characteristics of the poor; mechanisms that generate poverty traps and path dependence of growth processes.

4. Political Institutions and the Functioning of the State
The determinants of democracy; alternative institutional trajectories and their relationship with economic performance; within-country differences in the functioning of state institutions; state ownership and regulation; government failures and corruption.

Readings

1. Debraj Ray, *Development Economics,* Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction,* Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty,* Oxford University Press, 2006.
4. Kaushik Basu, *The Oxford Companion to Economics in India,* OUP, 2007.
5. Amartya Sen, *Development as Freedom,* OUP, 2000.
6. Daron Acemoglu and James Robinson, *Economic Origins of Dictatorship and Democracy*, Cambridge University Press, 2006.

7. Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, 1994

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Course Description

This course examines sector-specific polices and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

Course Outline

1. Macroeconomic Policies and Their Impact
Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation.

2. Policies and Performance in Agriculture
Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.

3. Policies and Performance in Industry
Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment.

4. **Trends and Performance in Services**

Readings:

1. Shankar Acharya, 2010, ‒Macroeconomic Performance and Policies 2000-8,‖ in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
2. Rakesh Mohan, 2010, ‒India's Financial Sector and Monetary Policy Reforms,‖ in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, ‒Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27*.
4. B.N. Goldar and S.C. Aggarwal, 2005, ‒Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.
5. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, ‒Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May.
6. Kunal Sen, 2010, ‒Trade, Foreign Direct Investment and Industrial Transformation in India, ïn Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.
7. A. Ahsan, C. Pages and T. Roy, 2008, ‒Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, *Globalization, Labour Markets and Inequality in India*, Routledge.

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8. Dipak Mazumdar and Sandeep Sarkar, 2009, ‒The Employment Problem in India and the Phenomenon of the ‗Missing Middle‖, *Indian Journal of Labour Economics*.

9. J. Dennis Rajakumar, 2011, ‒Size and Growth of Private Corporate Sector in Indian Manufacturing, *Economic and Political Weekly,* April.

10. Ramesh Chand, 2010, ‒Understanding the Nature and Causes of Food Inflation,‖ *Economic and Political Weekly*, February.

11. Bishwanath Goldar, 2011, ‒Organised Manufacturing Employment: Continuing the Debate‖, *Economic and Political Weekly,* April.

12. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics in India*, Oxford University Press.

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Core Economics Course 14: DEVELOPMENT ECONOMICS-II

Course Description

This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

Course Outline

1. Demography and Development
Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation; migration.

2. Land, Labor and Credit Markets
The distribution of land ownership; land reform and its effects on productivity; contractual relationships between tenants and landlords; land acquisition; nutrition and labor productivity; informational problems and credit contracts; microfinance; inter-linkages between rural factor markets.

3. Individuals, Communities and Collective Outcomes
Individual behavior in social environments, multiple social equilibria; governance in organizations and in communities; individual responses to organizational inefficiency.

4. Environment and Sustainable Development
Defining sustainability for renewable resources; a brief history of environmental change; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change.

5. Globalization
Globalization in historical perspective; the economics and politics of multilateral agreements; trade, production patterns and world inequality; financial instability in a globalized world.

Readings

1. Debraj Ray, *Development Economics,* Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction,* Oxford University Press, 2007.

3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty,* Oxford University Press, 2006.

4. Thomas Schelling, *Micromotives and Macrobehavior*, W. W. Norton, 1978.

5. Albert O. Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States,* Harvard University Press, 1970.

6. Raghuram Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, 2010.

7. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action,* Cambridge University Press, 1990.

8. Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.

9. Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective,* University of Chicago Press, 2003.

GROUP-I

(i) ECONOMICS OF HEALTH AND EDUCATION

Course Description

The importance of education and health in improving well-being is reflected in their inclusion among the Millennium Development Goals adopted by the United Nations member states, which include among other goals, achieving universal primary education, reducing child mortality, improving maternal health and combating diseases. This course provides a microeconomic framework to analyze, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. It also gives an overview of health and education in India.

Course Outline

1. Role of Health and Education in Human Development
Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.

2. Microeconomic Foundations of Health Economics
Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

3. Evaluation of Health Programs
Costing, cost effectiveness and cost-benefit analysis; burden of disease.

4. Health Sector in India: An Overview
Health outcomes; health systems; health financing.

5. Education: Investment in Human Capital
Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India.

6. Education Sector in India: An Overview
Literacy rates, school participation, school quality measures.

Readings:

1. William, Jack, *Principles of Health Economics for Developing Countries*, World

Bank Institute Development Studies, 1999.
2. World Development Report, *Investing in Health,* The World Bank, 1993.
3. Ronald G., Ehrenberg and Robert S., Smith, *Modern Labor Economics: Theory and Public Policy,* Addison Wesley, 2005.

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(ii) APPLIED ECONOMETRICS

Course Description

The aim of this course is to provide a foundation in applied econometric analysis and develop skills required for empirical research in economics. Topics include specification and selection of regression models, dynamic econometric models, advanced methods in regression analysis and panel data models. Since the emphasis is on application of methods, this course requires understanding of econometric software and computing skills.

Course Outline

1. Stages in Empirical Econometric Research

2. Regression Diagnostics and Specification
Misspecification; functional forms; model selection.

3. Advanced Topics in Regression Analysis
Selected Topics:
Dynamic Econometric Models: distributed lag models; autoregressive models; instrumental variable estimation; simultaneous equation models.

4. Panel Data Models
Methods of estimation; fixed effects model; random effects model.

5. Introduction to Econometric Software Package
GRETL; E-VIEWS; STATA (any one).

Readings:

1. Jeffrey M. Wooldridge, *Econometrics*, CENGAGE learning, India Edition, 2009.
2. Dimitrios Asteriou and Stephen Hall, *Applied Econometrics: A Modern Approach*, Palgrave Macmillan, 2007.
3. Damodar Gujarati, *Econometrics by Example*, Palgrave Macmillan, 2011.

(iii) ECONOMIC HISTORY OF INDIA (1857-1947)

Course Description

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India's economic development after independence in 1947.

Course Outline

1. Introduction: Colonial India: Background and Introduction
Overview of colonial economy.

2. Macro Trends
National Income; population; occupational structure.

3. Agriculture
Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

4. Railways and Industry
Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

5. Economy and State in the Imperial Context
The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

Readings:

1. Lakshmi Subramanian, *"History of India 1707-1857"*, Orient Blackswan, 2010, Chapter 4.
2. Sumit Guha, 1991, Mortality decline in early 20th century India', *Indian Economic and Social History Review (IESHR),* pp 371-74 and 385-87.
3. Tirthankar Roy, *The Economic History of India 1857-1947*, Oxford University Press, 3rd edition, 2011.
4. J. Krishnamurty, *Occupational Structure,* Dharma Kumar (editor), The Cambridge Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter 6.
5. Irfan Habib, *Indian Economy 1858-1914,* A People's History of India, Vol.28, Tulika, 2006.

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6. Ira Klein, 1984, ‒When Rains Fail: Famine relief and mortality in British India‖, *IESHR* 21.
7. Jean Dreze, *Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger*, WIDER Studies in Development Economics, 1990, pp.13-35.
8. John Hurd, *Railways*, CEHI, Chapter 8, pp.737-761.
9. Rajat Ray (ed.), *Entrepreneurship and Industry in India*, 1994.
10. AK Bagchi, ‒Deindustrialization in India in the nineteenth century: Some theoretical implications‖, *Journal of Development Studies*, 1976.
11. MD Morris, *Emergence of an Industrial Labour Force in India*, OUP 1965, Chapter 11, Summary and Conclusions.
12. K.N. Chaudhuri, *Foreign Trade and Balance of Payments*, CEHI, Chapter 10.
13. B.R. Tomlison, 1975, *India and the British Empire 1880-1935,* IESHR, Vol.XII.
14. Dharma Kumar, *The Fiscal System,* CEHI, Chapter 12.
15. Basudev Chatterjee, *Trade, Tariffs and Empire*, OUP 1992, Epilogue.

Background reading for students:

Irfan Habib, *Indian Economy 1858-1914* (A People's History of India), Vol.28, Tulika 2006.

Daniel Thorner, *Agrarian Prospect in India*, 1977.

L. Visaria and P. Visaria, *Population*. CEHI, Chapter 5.

Course Description

Game theory is an integral part of modern economic analysis. Topics in Microeconomics - I introduces the students to elementary game theory under complete information. This course introduces the basic concepts of game theory in a way that allows students to use them in solving simple problems. The course will deal with the solution concepts for normal form and extensive form games along with a variety of economic applications.

Course Outline

1. **Normal form games**
The normal form; dominant and dominated strategies; dominance solvability; mixed strategies; Nash equilibrium; symmetric single population games; applications.

2. **Extensive form games with perfect information**
The game tree; strategies; subgame perfection; backward induction in finite games; commitment; bargaining; other applications.

Reading:

1. Martin J. Osborne, *An Introduction to Game Theory*, Oxford University Press, New Delhi, 2004.

(v) POLITICAL ECONOMY-I

Course Description

This course explores changes in the organisation of production, labour market institutions and corporate structure. It goes on to study the consequences of globalization, especially of financial flows, for the role of the state, economic performance, gender issues, environment, human welfare and development.

Course Outline

1. Introduction and Historical Overview
Perspective on political economy with a historical overview: capitalist development in the pre-second world war period, the _golden age' and later.

2. Changing Dynamics of Capitalist Production, Organisational Form and Labour Process
Fordist and post-fordist production; changing dynamics of organisation of production, markets and labour process; the changing nature of job security and labour rights.

3. The State in the Era of Globalisation: Welfare, Development and Autonomy
Globalisation and the limits of the welfare state, development and state autonomy.

4. The Changing Role of Finance
The changing role of finance in capital accumulation and corporate structure; finance and globalisation - financialisation, financial liberalisation and financial crisis.

5. The Social Dimension
Globalisation and uneven development – growth, inequality and exclusion.

6. New Perspectives
Gender in work, accumulation and globalisation; issues in environment and sustainability; alternatives ahead.

Readings:

1. Michel Beaud, *A History of Capitalism, 1500-2000*, trans. by Tom Dickman and Anny Lefebvre, New York: Monthly Review Press, 2001.
2. Ash Amin (ed.), *Post-Fordism: A Reader*, Blackwell, 1994.
3. Fran Tonkiss, *Contemporary Economic Sociology: Globalisation, Production, Inequality*, Chapter 4 (Fordism and After), Routledge India 2008 reprint, 2006.

4. S. Hymer, "The Multinational Corporation and the Law of Uneven Development", in H. Radice (ed.) *International Firms and Modern Imperialism*, Penguin Books, 1975.
5. G. Gereffi, J. Humphrey and T. Sturgeon, 2005, ‖The Governance of Global Value Chains‖, *Review of International Political Economy*, Volume 12: 78–104.
6. Narasimha Reddy, ‖Economic Globalisation, Past and Present – The Challenges to Labour‖ in Jomo K.S. & Khoo Khay Jin (ed.) *Globalization and Its Discontents, Revisited*, Sephis -Tulika Books, 2003.
7. David Harvey, *A Brief History of Neoliberalism*, OUP, 2005.
8. Andrew Glyn, ‖Challenges to Capital‖, in *Capitalism Unleashed: Finance, Globalization and Welfare*, Oxford: Oxford University Press, (Ch. One, pp. 1-24), 2006.
9. G Dumenil and D Levy, *The Crisis of Neoliberalism*, Harvard University Press, 2011.
10. K.S. Jomo (ed.), *The Long Twentieth Century: The Great Divergence: Hegemony, Uneven Development and Global Inequality*, OUP, 2006.
11. Gary Dymsky, 2005, ‖Financial Globalization, Social Exclusion and Financial Crisis‖, *International Review of Applied Economics*, Vol. 19: 439–457.
12. E. Stockhammer, ‖Financialization and the Global Economy‖, in G. Epstein and M.H. Wolfson (ed.) *The Political Economy of Financial Crises*, Oxford University Press, 2010. [Also in Working Paper Series, No. 240, Political Economy Research Institute, University of Massachusetts Amherst]
13. J.P. Smith and M.P. Ward, 1989, ‖Women in the Labour Market and in the Family‖, *Journal of Economic Perspectives*, Volume 3: 9-23.
14. Marilyn Power, 2004, ‖Social Provisioning as a Starting Point for Feminist Economics‖, *Feminist Economics*, Volume 10: 3-19.
15. John Bellamy Foster, *Ecology against Capitalism*, Monthly Review Press, 2002

(vi) MONEY AND FINANCIAL MARKETS

Course Description

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Outline

1. Money
Concept, functions, measurement; theories of money supply determination.

2. Financial Institutions, Markets, Instruments and Financial Innovations
a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.
b. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.

3. Interest Rates
Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

4. Banking System
a. Balance sheet and portfolio management.
b. Indian banking system: Changing role and structure; banking sector reforms.

5. Central Banking and Monetary Policy
Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

Readings

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets,* AITBS, 1996.
4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an Emerging Market,* Oxford University Press, 2011.

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5. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets,* Tata McGraw Hill, 5th edition, 2011.
6. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
7. N. Jadhav, *Monetary Policy, Financial Stability and Central Banking in India,* Macmillan, 2006.
8. R.B.I. – *Report of the Working Group: Money Supply Analytics and Methodology of Compilation*, 1998.
9. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).

Course Description

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The paper is divided into two sections, one dealing with the theory of public economics and the other with the Indian public finances.

Course Outline

1. Public Economic Theory

a. Fiscal functions: an overview.
b. Public Goods: definition, models of efficient allocation, pure and impure public goods, free riding.
c. Externalities: the problem and its solutions, taxes versus regulation, property rights, the Coase theorem.
d. Taxation: its economic effects; dead weight loss and distortion, efficiency and equity considerations, tax incidence, optimal taxation.

2. Indian Public Finances

a. Tax System: structure and reforms
b. Budget, deficits and public debt
c. Fiscal federalism in India

Readings:

1. J. Hindriks, G. Myles: *Intermediate Public Economics*, MIT Press, 2006.
2. H. Rosen, T. Gayer: *Public Finance*, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, *Economics of the Public Sector,* W.W. Norton & Company, 3rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice,* McGraw Hill Publications, 5th edition, 1989.
5. John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1st edition, 1998.
6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7th edition, 2005.
7. Mahesh Purohit, *Value Added Tax: Experiences of India and Other Countries,* 2007.
8. Kaushik Basu and A. Maertens (ed.), *The New Oxford Companion to Economics in India*, Oxford University Press, 2013.
9. M.M. Sury, *Government Budgeting in India,* 1990.

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10.   M. Govinda Rao, *Changing Contours of Federal Fiscal Arrangements in India, Amaresh Bagchi (ed.), Readings in Public Finance*, Oxford University Press,
2005.
11. Paul Samuelson, 1955, ‒Diagrammatic Exposition of a theory of Public Expenditure, *Review of Economics and Statistics,* Volume 37.
12. Shankar Acharya, 2005, ‒Thirty Years of Tax Reform in India‖, *Economic and Political Weekly,* May 14-20.
13. Rangarajan and D.K. Srivastava, 2005, ‒Fiscal Deficit and Government Debt: Implications for Growth and Stabilizati*on", Economic and Political Weekly,* July2-8.
14. M. Govinda Rao, 2011, ‒Goods and Services Tax: A Gorilla, Chimpanzee or a Genius like Primates?, *Economic and Political Weekly*, February 12-18.
15. Report of the 13th Finance Commission, 2010-15.
16. *Economic Survey*, Government of India (Latest).
17. *State Finances: A Study of Budgets*, Reserve Bank of India (Latest).

DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS

GROUP-II

(viii) POLITICAL ECONOMY-II

Course Description

Employing perspectives from alternative schools of thought, this course explores the development of the structure and institutions of capitalist economies and their relationship to social and political forces. Students are expected to read some classic texts as well as more recent commentaries.

Course Outline

1. Analysing Social Change in Historical Perspective
The method of historical materialism; the transition from feudalism to capitalism; capitalism as a historical process – alternative perspectives.

2. Capitalism as an Evolving Economic System
Basic features; accumulation and crisis; the modern corporation; monopoly capitalism—alternative perspectives.

3. The State in Capitalism
The state and the economy – contestation and mutual interdependence; the state as an arena of conflict; imperialism – the basic foundations.

Readings:

1. J. Gurley, "The Materialist Conception of History", Ch.2.1 in R. Edwards, M. Reich and T. Weisskopf (ed.), *The Capitalist System*, 2nd edition, 1978.
2. O. Lange, *Political Economy*, vol. 1, 1963, Chapters 1 and 2.
3. E.K. Hunt, *History of Economic Thought*, M.E. Sharpe, Indian edn, Shilpi Publications, 2004.
4. Irfan Habib, 1995, "Capitalism in History", *Social Scientist*, Vol. 23: 15-31.
5. R.L. Heilbroner, "Capitalism", in The New Palgrave Dictionary of Modern Economics, Macmillan, 1987**.** Also reprinted as Chapter 2 in *Behind the Veil of Economics* by R.L. Heilbroner, W.W. Norton, 1988.
6. P. Sweezy, *The Theory of Capitalist Development*, Monthly Review Press, 1942,

chapters 2, 4, 5, 6, 8 and 10.

7. Anwar Shaikh, Entries on "Economic Crises" and "Falling Rate of Profit" in T. Bottomore et al (eds.), *The Dictionary of Marxist Thought*, OUP, Indian edition, Maya Blackwell, 2000.

8. Vamsi Vakulabharanam, 2009, ‒The Recent Crisis in Global Capitalism: Towards a Marxian Understanding‖, *Economic and Political Weekly*, March 28, Vol. 44: 144-150.

9. J. Schumpeter, *Capitalism, Socialism and Democracy*, George Allen and Unwin 1976, Chapters 6, 7 and 8.

10. P. Baran (1957), *The Political Economy of Growth*, Chapter 3, Pelican edition, 1973.

11. R. Heilbroner, ‒The Role of the State‖, Ch.4 in *The Nature and Logic of Capitalism*, 1985.

12. M. Kalecki, ‒Political Aspects of Full Employment‖, in E.K. Hunt and J.G. Schwarz   (eds.), *A Critique of Economic Theory*, Penguin Books, 1972.

13. Amit Bhaduri, ‒Nationalism and Economic Policy in the Era of Globalization‖, Ch. 2 in Deepak Nayyar (ed), *Governing Globalization: Issues and Institutions*, OUP, 2002 [*also* WIDER Working Paper no.188, WIDER website (2000)].

14. Prabhat Patnaik, ‒"Lenin's Theory of Imperialism Today", in K.S. Jomo (ed.) *The Long Twentieth Century: The Great Divergence: Hegemony, Uneven Development and Global Inequality*, OUP.

15. James O'Connor, "The Meaning of Economic Imperialism," in Robert Rhodes, ed., *Imperialism and Underdevelopment*, New York: Monthly Review Press, 1970, pages 101 to 111.

<u>**Course Description**</u>

This course investigates selected issues in comparative historical perspective over the 19th century and the first few decades of the 20th century. The course focuses on a set of countries, which followed clearly diverse trajectories and patterns of growth to achieve their industrial transition and compares the outcomes of these diverse trajectories on sectoral change, inter-sectoral relations, labour processes and industrial relations and also compares the role of the state in facilitating the respective trajectories.

<u>**Course Outline**</u>

1. **Introduction and Perspectives on Comparative Economic Development**

2. **An Overview of Economic Development of the countries selected for case studies**

3. **Agriculture**
Agrarian surplus and the role of the peasantry in economic development.

4. **Industry**
The industrial revolution in Britain; Industrialisation in late industrialisers.

5. **The Factory System and Making of the Industrial Working Class**
Division of labour, structure of industrial authority, organisation of work and industrial production, relationship between workers and managers.

6. **The Role of the State in Industrial and Developmental Transition**

Readings:

1. E.J. Hobsbawm, *World of Labour: Further studies in the history of labour,* London Weidenfeld & Nicholson, 1984.
2. E.J. Hobsbawm, *Industry and Empire: An Economic History of Britain since 1750*, Weidenfeld & Nicholson, 1968.
3. Peter Mathias, *The First Industrial Nation, An Economic History of Britain, 1700-1914*. 2nd edition Methuen, 1983.
4. T. Nakamura, *Economic Growth in Pre-War Japan*, Tr. by Robert A Feldman, Yale University Press, 1983.
5. Okochi, Karsh and Levine, *Workers and Employees in Japan, The Japanese Employment Relations System,* University of Tokyo, 1965.
6. Y. Hayami, A *Century of Agricultural Growth in Pre-War Japan: Its Relevance to Asian Development*, University of Minnesota Press, 1975.
7. Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy 1925-1975*, Stanford University Press, 1982.

8. W.W. Lockwood, *Economic Development of Japan,* Expanded edition, Princeton University Press, 1966.
9. Dobb M., *Soviet Economic Development Since 1917,* Universal Book Stall, New Delhi, 1995.
10. Paul R. Gregory and Robert C. Stuart, *Soviet Economic Structure and Performance*, Harper & Row, 3rd edition, 1986.
11. Timothy W. Guinnane, 2002, ‒Delegated Monitors, Large and Small: Germany's banking System, 1800 ‒1914‖, *Journal of Economic Literature, Volume XL:*73-124.
12. Richard A. Easterlin, Davis and Parker, *American Economic Growth: An economist's History of the United States*, Harper & Row, 1972.
13. Hughes and Cain, *American Economic History*, HarperCollins College Publishers, 4th edition, 1994.

Background readings for teachers:

Angus Maddison, *Dynamic Forces in Capitalist Development, A Long-Run Comparative View*, Oxford University Press, 1991.

P.K.O'Brien, 1986, ‒Do we have a Typology for the Study of European Industrialization in the XIXth Century?‖, *Journal of European Economic History*, XV 3:291-333.

Course Description

This course introduces students to the economics of finance. Some of the basic models used to benchmark valuation of assets and derivatives are studied in detail; these include the CAPM, and the Binomial Option Pricing models. The course ends with a brief introduction to corporate finance.

Course Outline

1. Investment Theory and Portfolio Analysis

a. Deterministic cash-flow streams
Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curves; spot rates and forward rates.

b. Single-period random cash flows
Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

c. CAPM
The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

2. Options and Derivatives
Introduction to derivatives and options; forward and futures contracts; options; other derivatives; forward and future prices; stock index futures; interest rate futures; the use of futures for hedging; duration-based hedging strategies; option markets; call and put options; factors affecting option prices; put-call parity; option trading strategies: spreads; straddles; strips and straps; strangles; the principle of arbitrage; discrete processes and the binomial tree model; risk-neutral valuation.

3. Corporate Finance
Patterns of corporate financing: common stock; debt; preferences; convertibles; Capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani-Miller theorem.

Readings:

1. David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997.
2. Hull, John C., *Options, Futures and Other Derivatives*, Pearson Education, 6th edition, 2005.
3. Thomas E. Copeland, J. Fred Weston and Kuldeep Shastri*, Financial Theory and Corporate Policy*, Prentice Hall, 4th edition, 2003.
4. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7th edition, 2002.
5. Stephen A. Ross, Randolph W. Westerfield and Bradford D. Jordan, *Fundamentals of Corporate Finance.* McGraw-Hill, 7th edition, 2005.
6. Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Company, 2003.
7. William Sharpe, Gordon Alexander and Jeffery Bailey, *Investments,* Prentice Hall of India, 6th edition, 2003.

(xi)   TOPICS IN MICROECONOMICS - II

Course Description

This course deals with repeated games and games with incomplete information. Ideas related to asymmetric information among the interacting economic agents would be the main focus of this course. Students learn the concept of Bayesian and Perfect Bayesian equilibrium. The course ends with the application of game theory to analyse moral hazard, adverse selection and signalling problems.

Course Outline

1. Repeated Games.
Finitely repeated games and backward induction; infinitely repeated games; history dependent strategies; one-step deviation property; the repeated prisoners' dilemma; idea of folk theorem.

2. Simultaneous move games with incomplete information (Bayesian games).
Strategies; Bayesian Nash equilibrium; auctions; other applications.

3. Extensive form games with imperfect information.
Strategies; beliefs and sequential equilibrium; applications.

4. Information economics.
Adverse selection; moral hazard; signalling games.

Readings:

1. Martin J. Osborne, *An Introduction to Game Theory*, Oxford University Press, New Delhi, 2004.
2. Hugh Gravelle and Ray Rees, *Microeconomics*, Pearson Education, 2nd edition, 1992.

ENVIRONMENTAL ECONOMICS

Course Description

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Course Outline

1. Introduction
What is environmental economics; review of microeconomics and welfare economics.

2. The Theory of Externalities
Pareto optimality and market failure in the presence of externalities; property rights and the coase theorem.

3. The Design and Implementation of Environmental Policy
Overview; pigouvian taxes and effluent fees; tradable permits; choice between taxes and quotas under uncertainty; implementation of environmental policy.

4. International Environmental Problems
Trans-boundary environmental problems; economics of climate change; trade and environment.

5. Measuring the Benefits of Environmental Improvements
Non-Market values and measurement methods; risk assessment and perception.

6. Sustainable Development
Concepts; measurement.

Readings:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2nd edition, 2010.
2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W.W. Norton, 5th edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, ‒Environmental Economics: A Survey,‖ *Journal of Economic Literature*, Volume 30:675-740.

Course Description

This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It then builds on the models of open economy macroeconomics developed in courses 08 and 12, focusing on national policies as well as international monetary systems. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

Course Outline

1. Introduction
What is international economics about? An overview of world trade.

2. Theories of International Trade
The Ricardian, specific factors, and Heckscher-Ohlin models; new trade theories; the international location of production; firms in the global economy — outsourcing and multinational enterprises.

3. Trade Policy
Instruments of trade policy; political economy of trade policy; controversies in trade policy.

4. International Macroeconomic Policy
Fixed versus flexible exchange rates; international monetary systems; financial globalization and financial crises.

Readings:

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012.
2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.

(xiv)   <u>DISSERTATION</u>

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Syllabus for B.A. (Hons.)

Generic Elective Courses in Economics

Semester I	Semester II
Generic Elective in Economics I: Introductory Microeconomics	**Generic Elective in Economics II: Introductory Macroeconomics**
Semester III	**Semester IV**
Generic Elective in Economics III: (a) **Indian Economy-I** *OR* (b) **Money and Banking** *OR* (c) **Environmental Economics**	**Generic Elective in Economics IV:** (a) **Indian Economy-II** *OR* (b) **Economic History of India 1857-1947** *OR* (c) **Public Finance**
Semester V	**Semester VI**

1

Generic Elective in Economics I: Introductory Microeconomics

Course Description

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Outline

1. Exploring the subject matter of Economics
Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs.

2. Supply and Demand: How Markets Work, Markets and Welfare
Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

3. The Households
The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision - choice between leisure and consumption.

4. The Firm and Perfect Market Structure
Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run.

5. Imperfect Market Structure
Monopoly and anti-trust policy; government policies towards competition; imperfect competition.

6. Input Markets
Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.

2

Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

<u>**Generic Elective in Economics II: Introductory Macroeconomics**</u>

<u>**Course Description**</u>

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

<u>**Course Outline**</u>

1. Introduction to Macroeconomics and National Income Accounting
Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy; balance of payments: current and capital accounts.

2. Money
Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy.

3. Inflation
Inflation and its social costs; hyperinflation.

4. The Closed Economy in the Short Run
Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary multipliers.

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics,* Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Generic Elective in Economics III(a): Indian Economy-I

Course Description

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points.

Course Outline

1. Economic Development since Independence
Major features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

2. Population and Human Development
Demographic trends and issues; education; health and malnutrition.

3. Growth and Distribution
Trends and policies in poverty; inequality and unemployment.

4. **International Comparisons**

Readings:

1. Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
3. Rakesh Mohan, 2008, ‒Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.
4. S.L. Shetty, 2007, ‒India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development.*
5. Himanshu, 2010, ‒Towards New Poverty Lines for India, *Economic and Political Weekly*, January.
6. Jean Dreze and Angus Deaton, 2009, ‒Food and Nutrition in India: Facts and Intepretations, *Economic and Political Weekly*, February.
7. Himanshu. 2011, ‒Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.
8. Rama Baru et al, 2010, ‒Inequities in Access to Health Services in India: Caste, Class and Region, *Economic and Political Weekly*, September.
9. Geeta G. Kingdon, 2007, ‒The Progress of School Education in India, *Oxford Review of Economic Policy.*

10. J.B.G. Tilak, 2007, ‒Post Elementary Education, Poverty and Development in India, *International Journal of Educational Development.*
11. T. Dyson, 2008, ‒India's Demographic Transition and its Consequences for Development in Uma Kapila, editor, *Indian Economy Since Independence*, 19th edition, Academic Foundation.
12. Kaushik Basu, 2009, ‒China and India: Idiosyncratic Paths to High Growth, *Economic and Political Weekly*, September.
13. K. James, 2008, ‒Glorifying Malthus: Current Debate on Demographic Dividend in India, *Economic and Political Weekly*, June.
14. Reetika Khera, 2011, ‒India's Public Distribution System: Utilisation and Impact *Journal of Development Studies*.
15. Aniruddha Krishna and Devendra Bajpai, 2011, ‒Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, *Economic and Political Weekly*, September.
16. Kaushik Basu and A. Maertens, eds, 2013, *Oxford Companion to Economics*, Oxford University Press.

Generic Elective in Economics III(b): Money and Banking

Course Description

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Outline

1. Money
Concept, functions, measurement; theories of money supply determination.

2. Financial Institutions, Markets, Instruments and Financial Innovations
a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.

b. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.

3. Interest Rates
Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

4. Banking System

a. Balance sheet and portfolio management.
b. Indian banking system: Changing role and structure; banking sector reforms.

5. Central Banking and Monetary Policy
Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

<u>**Readings**</u>

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets,* Tata McGraw Hill, 5th edition, 2011.
4. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
5. Various latest issues of R.B.I. Bulletins, Annual Reports, Reports on Currency and Finance and Reports of the Working Group, IMF Staff Papers.

<u>**Generic Elective in Economics III(c): Environmental Economics**</u>

<u>**Course Description**</u>

This course introduces students to concepts, methods and policy options in managing the environment using tools of economic analysis. This course should be accessible to anyone with an analytical mind and familiarity with basic concepts of economics. Since several environmental problems are caused by economic activity (for instance, carbon emissions, over-harvesting of renewable resources and air and water pollution as a by-product of industrial activity), this course examines different approaches to adjusting behaviour through economic institutions such as markets and incentives as well as through regulation, etc. It also addresses the economic implications of environmental policies through practical applications of methods for valuation of environmental goods and services and quantification of environmental damages. Conversely, the impact of economic growth on the environment is also addressed under the rubric of sustainable development. Environmental problems and issues from the Indian and international context (especially global warming)are used to illustrate the concepts and methods presented in the course. The course will be useful for students aiming towards careers in the government sector, policy analysis, business, journalism and international organisations.

<u>**Course Outline**</u>

7

1. Introduction

Key environmental issues and problems, economic way of thinking about these problems, basic concepts from economics; Pareto optimality and market failure in the presence of externalities; property rights and other approaches.

2. The Design and Implementation of Environmental Policy

Overview, Pigouvian taxes and effluent fees, tradable permits, implementation of environmental policies in India and international experience; transboundary environmental problems; economics of climate change.

3. Environmental Valuation Methods and Applications

Valuation of non-market goods and services--theory and practice; measurement methods; cost-benefit analysis of environmental policies and regulations.

4. Sustainable Development

Concepts; measurement; perspectives from Indian experience

Readings

1. Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, "*Natural Resource and Environmental Economics*", Pearson Education/Addison Wesley, 4th edition, 2011.
2. Charles Kolstad, "*Intermediate Environmental Economics*", Oxford University Press, 2nd edition, 2010.
3. Robert N. Stavins (ed.), "*Economics of the Environment: Selected Readings*", W.W. Norton, 6th edition, 2012.
4. Robert Solow , "An Almost Practical Step toward Sustainability," Resources for the Future 40th anniversary lecture,1992.
5. Kenneth Arrow et al. , "Are We Consuming Too Much?" *Journal of Economic Perspectives*, 18(3): 147-172, 2004.
6. IPCC (Intergovernmental Panel on Climate Change), Fifth Assessment Report (forthcoming 2014).

Generic Elective in Economics IV(a): Indian Economy-II

Course Description

This course examines sector-specific polices and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence.

Course Outline

1. Macroeconomic Policies and Their Impact
Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation.

2. Policies and Performance in Agriculture
Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.

3. Policies and Performance in Industry
Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment.

4. **Trends and Performance in Services**

Readings:

1. Shankar Acharya, 2010, ‒Macroeconomic Performance and Policies 2000-8,‖ in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
2. Rakesh Mohan, 2010, ‒India's Financial Sector and Monetary Policy Reforms, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
    3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, ‒Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27.*
6. Kunal Sen, 2010, ‒Trade, Foreign Direct Investment and Industrial Transformation in India, ïn Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.
7. A. Ahsan, C. Pages and T. Roy, 2008, ‒Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, *Globalization, Labour Markets and Inequality in India*, Routledge.
8. Dipak Mazumdar and Sandeep Sarkar, 2009, ‒The Employment Problem in India and the Phenomenon of the ˍMissing Middle, *Indian Journal of Labour Economics*.
9. J. Dennis Rajakumar, 2011, ‒Size and Growth of Private Corporate Sector in Indian Manufacturing, *Economic and Political Weekly,* April.
10. Ramesh Chand, 2010, Understanding the Nature and Causes of Food Inflation,

Economic and Political Weekly, February.

11. Bishwanath Goldar, 2011, Organised Manufacturing Employment: Continuing the Debate, *Economic and Political Weekly,* April.

12. Kaushik Basu and A. Maertens, eds, 2013. *The New Oxford Companion to Economics in India*, Oxford University Press.

Generic Elective in Economics IV(b): Economic History of India 1857-1947

Course Description

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India's economic development after independence in 1947.

Course Outline

1. Introduction: Colonial India: Background and Introduction
Overview of colonial economy.

2. Macro Trends
National Income; population; occupational structure.

3. Agriculture
Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

4. Railways and Industry
Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

5. Economy and State in the Imperial Context
The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

Readings:

1. Lakshmi Subramanian, *"History of India 1707-1857",* Orient Blackswan, 2010,

Chapter 4.

2. Sumit Guha, 1991, ‗Mortality decline in early 20th century India', *Indian Economic and Social History Review (IESHR),* pp 371-74 and 385-87.

3. Tirthankar Roy, *The Economic History of India 1857-1947*, Oxford University Press, 3rd edition, 2011.

4. J. Krishnamurty, *Occupational Structure,* Dharma Kumar (editor), The Cambridge Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter 6.

5. Irfan Habib, *Indian Economy 1858-1914,* A People's History of India, Vol.28, Tulika, 2006.

6. Ira Klein, 1984, ‑When Rains Fail: Famine relief and mortality in British India‖, *IESHR* 21.

7. Jean Dreze, *Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger*, WIDER Studies in Development Economics, 1990, pp.13-35.

8. John Hurd, *Railways*, CEHI, Chapter 8, pp.737-761.

9. Rajat Ray (ed.), *Entrepreneurship and Industry in India*, 1994.

10. AK Bagchi, ‑Deindustrialization in India in the nineteenth century: Some theoretical implications‖, *Journal of Development Studies*, 1976.

11. MD Morris, *Emergence of an Industrial Labour Force in India*, OUP 1965, Chapter 11, Summary and Conclusions.

12. K.N. Chaudhuri, *Foreign Trade and Balance of Payments*, CEHI, Chapter 10.

13. B.R. Tomlison, 1975, *India and the British Empire 1880-1935,* IESHR, Vol.XII.

14. Dharma Kumar, *The Fiscal System,* CEHI, Chapter 12.

15. Basudev Chatterjee, *Trade, Tariffs and Empire*, OUP 1992, Epilogue.

Background reading for students:

Irfan Habib, *Indian Economy 1858-1914* (A People's History of India), Vol.28, Tulika 2006.

Daniel Thorner, *Agrarian Prospect in India*, 1977.

1

Generic Elective in Economics IV(c): Public Finance

Course Description

This course is a non-technical overview of government finances with special reference to India. The course does not require any prior knowledge of economics. It will look into the efficiency and equity aspects of taxation of the centre, states and the local governments and the issues of fiscal federalism and decentralisation in India. The course will be useful for students aiming towards careers in the government sector, policy analysis, business and journalism.

Course Outline

Part 1: Theory
1. Overview of Fiscal Functions, Tools of Normative Analysis, Pareto Efficiency, Equity and the Social Welfare.
2. Market Failure, Public Good and Externalities.
3. Elementary Theories of Product and Factor Taxation (Excess Burden and Incidence).

Part 2: Issues from Indian Public Finance
4. Working of Monetary and Fiscal Policies.
5. Current Issues of India's Tax System.
6. Analysis of Budget and Deficits
7. Fiscal Federalism in India
8. State and Local Finances

Readings

1. Musgrave, R.A. and P.B. Musgrave, *Public Finance in Theory and Practice*, Mc-Graw Hill, 1989.
2. Mahesh Purohit , "*Value Added Tax: Experience of India and Other Countries*", Gayatri Publications, 2007.
3. Kaushik Basu, and A. Maertens (ed.), *The Oxford Companion to Economics in India,* Oxford University Press,2007.
4. M.M Sury, Government Budgeting in India, Commonwealth Publishers, 1990.
5. Shankar Acharya, "Thirty years of tax reform" in India, *Economic and Political Weekly,* May 2005.
6. Government of India, *Report of the 13th Finance Commission.*
7. *Economic Survey*, Government of India (latest).
8. State Finances: A Study of Budgets*, Reserve Bank of India* (latest).

1

Skill Enhancement Courses (SEC) offered by Economics Department

Skill Enhancement Course (SEC) I: FINANCIAL ECONOMICS

Course Description

This course introduces students to the economics of finance. The course does not require any prior knowledge of economics. This course should be accessible to anyone with an exposure to elementary mathematics. The course is designed to impart the essential aspects of financial asset valuation. The students will be introduced to numerical techniques in finance using spreadsheet programmes such as Microsoft Excel. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and business journalism.

Course Outline

1. Deterministic cash-flow streams
Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curves; spot rates and forward rates.

2. Single-period random cash flows
Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

3. Capital Asset Pricing Model (CAPM)
The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

Readings

1. David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997.
2. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7th edition, 2002.
3. Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Company, 2003.
4. Simon Benninga, *Financial Modeling*, MIT Press, USA, 1997.

Skill Enhancement Course (SEC) II: DATA ANALYSIS

Course Description:

This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data.

Course Outline:

1. Sources of data. Population census versus sample surveys. Random sampling.
2. Univariate frequency distributions. Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and kurtosis.
3. Bivariate frequency distribution. Correlation and regression. Rank correlation.
4. Introduction to probability theory. Notions of random experiment, sample space, event, probability of an event. Conditional probability. Independence of events. Random variables and probability distributions. Binomial and normal distributions.
5. Estimation of population parameters from sample data. Unbiased estimators for population mean and variance.
6. Basics of index numbers: price and quantity index numbers.

Readings:

1. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition, Pitman.
2. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics* (Schaum Series).

UNIVERSITY OF DELHI

DEPARTMENT OF COMMERCE

UNDERGRADUATE PROGRAMME
(Courses effective from Academic Year 2015-16)

SYLLABUS OF COURSES TO BE OFFERED
Core Courses, Elective Courses & Ability Enhancement Courses

Preamble

The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education System of country. The important measures taken to enhance academic standards and quality in higher education include innovation and improvements in curriculum, teaching-learning process, examination and evaluation systems, besides governance and other matters.

The UGC has formulated various regulations and guidelines from time to time to improve the higher education system and maintain minimum standards and quality across the Higher Educational Institutions (HEIs) in India. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the higher education system. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system. While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching–learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. Presently the performance of the students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated these guidelines.

CHOICE BASED CREDIT SYSTEM (CBCS):

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the UGC has formulated the guidelines to be followed.

Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
2. **Elective Course:** Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.
   2.1 **Discipline Specific Elective (DSE) Course**: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).
   2.2 **Dissertation/Project**: An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.
   2.3 **Generic Elective (GE) Course**: An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.
   P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.
3. **Ability Enhancement Courses (AEC)/Competency Improvement Courses/Skill Development Courses/Foundation Course:** The Ability Enhancement (AE) Courses may be of two kinds: AE Compulsory Course (AECC) and AE Elective Course (AEEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement. They ((i) Environmental Science, (ii) English/MIL Communication) are mandatory for all disciplines. AEEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.
   3.1 AE Compulsory Course (AECC): Environmental Science, English Communication/MIL Communication.
   3.2 AE Elective Course (AEEC): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based instruction.

Project work/Dissertation is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

Details of courses under B.A (Honors), B.Com (Honors) & B.Sc. (Honors)

Course	*Credits	
	Theory+ Practical	Theory + Tutorial

===

I. Core Course

(14 Papers)   14X4= 56   14X5=70

Core Course Practical / Tutorial*

(14 Papers)   14X2=28   14X1=14

II. Elective Course

(8 Papers)

A.1. Discipline Specific Elective   4X4=16   4X5=20

(4 Papers)

A.2. Discipline Specific Elective

    Practical/ Tutorial*   4 X 2=8   4X1=4

(4 Papers)

B.1. Generic Elective/

    Interdisciplinary   4X4=16   4X5=20

(4 Papers)

B.2. Generic Elective

    Practical/ Tutorial*   4 X 2=8   4X1=4

(4 Papers)

- **Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester**

III. Ability Enhancement Courses

1. **Ability Enhancement Compulsory**

(2 Papers of 2 credit each)   2 X 2=4   2 X 2=4

    Environmental Science

    English/MIL Communication

2. **Ability Enhancement Elective** (Skill Based)

    (Minimum 2)   2 X 2=4   2 X 2=4

(2 Papers of 2 credit each)

              _____   _____

Total credit   **140**   **140**

Institute should evolve a system/policy about ECA/ General Interest/Hobby/Sports/NCC/NSS/related courses on its own.

* wherever there is a practical there will be no tutorial and vice-versa

B. Com. (Hons.): Three-Year (6-Semester) CBCS Programme

Paper No.	Course Structure	
	Semester I	
BCH-1.1	Environmental Studies	Ability Enhancement Compulsory Course (AECC-1)
BCH-1.2	Financial Accounting	Core Course (C-1)
BCH-1.3	Business Laws	Core Course(C-2)
BCH-1.4	Generic Elective (GE-1) (Any *one* of the following)	Generic Elective(GE-1)
	a. Micro Economics	
	b. Insurance and Risk Management	
	Semester II	
BCH-2.1	Business Communication (Language-English/Hindi/MIL)	Ability Enhancement Compulsory Course (AECC-2)
BCH-2.2	Corporate Accounting	Core Course (C-3)
BCH-2.3	Corporate Laws	Core Course (C-4)
BCH-2.4	Generic Elective (GE-2) (Any *one* of the following)	Generic Elective(GE-2)
	a. Macro Economics	
	b. Investing in Stock Markets	
	Semester III	
BCH-3.1	Human Resource Management	Core Course (C-5)
BCH-3.2	Income-tax Law and Practice	Core Course (C-6)
BCH-3.3	Management Principles and Applications	Core Course (C-7)
BCH-3.4	Generic Elective (GE-3) (Any *one* of the following)	Generic Elective(GE-3)
	a. Business Statistics	
	b. Project Management	
BCH-3.5	Skill-Enhancement Course (SEC-1) (Any *one* of the following)	Skill-Enhancement Course (SEC-1)
	a. E-Commerce	
	b. Training and Development	
	c. E-Marketing	
	d. Personal Tax Planning	

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	Semester IV	
BCH-4.1	Cost Accounting	Core Course (C-8)
BCH-4.2	Business Mathematics	Core Course (C-9)
BCH-4.3	Computer Applications in Business	Core Course (C-10)
BCH-4.4	Generic Elective (GE-4) (Any *one* of the following)	Generic Elective (GE-4)
	a. Indian Economy	
	b. Economics of Regulation of Domestic and Foreign Exchange Markets	
BCH-4.5	Skill-Enhancement Course (SEC-2) (Any *one* of the following)	Skill-Enhancement Course (SEC-2)
	a. Entrepreneurship	
	b. Collective Bargaining and Negotiation Skills	
	c. E-Filing of Returns	
	d. Cyber Crimes and Laws	
	Semester V	
BCH-5.1	Principles of Marketing	Core Course (C-11)
BCH-5.2	Fundamentals of Financial Management	Core Course (C-12)
BCH-5.3	Discipline Specific Elective (DSE-1) (Any one of group A)	Discipline Specific Elective (DSE-1)
BCH-5.4	Discipline Specific Elective (DSE-2) (Any one of group A)	Discipline Specific Elective (DSE-2)
	a. Management Accounting	
	b. Corporate Tax Planning	
	c. Advertising	
	d. Banking and Insurance	
	e. Computerised Accounting System	
	f. Financial Markets, Institutions and Financial Services	
	g. Industrial Laws	
	h. Organisational Behaviour	
	Semester VI	
BCH-6.1	Auditing and Corporate Governance	Core Course (C-13)

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BCH-6.2	Indirect Tax Laws	Core Course (C-14)
BCH-6.3	Discipline Specific Elective (DSE-3) (Any one of group B)	Discipline Specific Elective(DSE-3)
BCH-6.4	Discipline Specific Elective (DSE-4) (Any one of group B)	Discipline Specific Elective (DSE-4)
	a. Fundamentals of Investment	
	b. Consumer Affairs and Customer Care	
	c. Business Tax Procedures and Management	
	d. International Business	
	e. Industrial Relations and Labour Laws	
	f. Business Research Methods and Project Work	
	g. New Venture Planning	
	h. Financial Reporting & Analysis	
	i. Compensation Management	

Notes:

1. For Practical Lab based
   a. Core Courses BCH 1.2 (Financial Accounting), BCH 3.2 (Income-tax Law and Practice), BCH 3.4 (Business Statistics), BCH 4.2 (Business Mathematics), and BCH 5.2 (Fundamentals of Financial Management) there shall be 4 Credit Hrs. for Lectures + one Credit hr. (Two Practical Periods per week per batch) for Practical Lab + one credit Hr for Tutorials (per group)
   b. Core Courses BCH 4.3 (Computer Applications in Business) and Discipline Specific Elective BCH Group A (e) (Computerised Accounting System), there shall be 4 Credit Hrs. for Lectures + Two Credit hrs. (4 Practical Periods per week per batch) for Practical Lab
   c. Skill Enhancement Elective Course BCH 3.5(E-Commerce), there shall be 3 Credit Hrs. for Lectures + One Credit hrs. (2 Practical Periods per week per batch) for Practical Lab
2. For other core and elective papers, there shall be 5 lectures and one Tutorial (per batch)

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B.Com. (Hons.): Semester - I
Paper BCH 1.2: FINANCIAL ACCOUNTING

Duration: 3 hrs.

Objective: To acquire conceptual knowledge of the financial accounting and to provide knowledge about the techniques for preparing accounts in different business organizations.

Unit I:
(a) Theoretical Framework
Accounting as an information system, the users of financial accounting information and their needs. Qualitative characteristics of accounting information. Functions, advantages and limitations of accounting. Branches of accounting. Basics of accounting; cash basis and accrual basis.
The nature of financial accounting principles – Basic concepts and conventions: entity, money measurement, going concern, cost, realization, accruals, periodicity, consistency, prudence (conservatism), materiality and full disclosures.
Financial accounting standards: Concept, benefits, procedure for issuing accounting standards in India. International Financial Reporting Standards (IFRS): - Need and procedures, Convergence to IFRS.
Distinction between Indian accounting standards (IND ASs) and Accounting standards (AS).
(b) Accounting Process
From recording of a business transaction to preparation of trial balance including adjustments: Capital and Revenue expenditures & Receipts, Preparation of Profit and Loss Account and Balance Sheet. (Sole Proprietorship only).
(c) Computerised Accounting Systems   **Practical Lab**
Computerised Accounting Systems: Computerized Accounts by using any popular accounting software: Creating a Company; Configure and Features settings; Creating Accounting Ledgers and Groups; Creating Stock Items and Groups; Vouchers Entry; Generating Reports - Cash Book, Ledger Accounts, Trial Balance, Profit and Loss Account, Balance Sheet, Funds Flow Statement, Cash Flow Statement, Selecting and shutting a Company; Backup and Restore data of a Company

Unit II:
(a) Business Income
Measurement of business income-Net income: the accounting period, the continuity doctrine and matching concept. Objectives of income measurement.
Revenue: Concept, Revenue recognition principles, Recognition of expenses.
The nature of depreciation. The accounting concept of depreciation. Factors in the measurement of depreciation. Methods of computing depreciation: straight line method and diminishing balance method; Disposal of depreciable assets- change of method.
Inventories: Meaning. Significance of inventory valuation. Inventory Record Systems: periodic and perpetual. Methods: FIFO, LIFO and Weighted Average.
(b) Preparation of financial statements of not for profit organization.

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Unit III: Accounting for Hire Purchase and Installment System

Calculation of interest ,partial and full repossession, Hire purchase trading (total cash price basis), stock and debtors system.Concepts of operating and financial lease.

Unit IV: Accounting for Inland Branches

Concept of dependent branches; accounting aspects; debtors system, stock and debtors system, branch final accounts system and whole sale basis system, Independent branches, Concept-accounting treatment: important adjustment entries and preparation of consolidated profit and loss account and balance sheet.

Unit V: Accounting for Dissolution of the Partnership Firm

Accounting of Dissolution of the Partnership Firm including Insolvency of partners, sale to a limited company and piecemeal distribution.

Note:

1. The relevant Indian Accounting Standards in line with the IFRS for all the above topics should be covered.

2. Any revision of relevant Indian Accounting Standard would become applicable immediately.

3. There shall be 4 Credit Hrs. for Lectures + one Credit hr. (Two Practical Periods per week per batch) for Practical Lab + one credit Hr for Tutorials (per group)

4. Examination Scheme for Computerised Accounting Systems – Practical for 20 marks. The practical examination will be for 1 hour.

5. Theory Exam shall carry 80 marks

Suggested Readings:

1. Monga, J.R. *Financial Accounting: Concepts and Applications*. Mayoor Paper Backs, New Delhi.
2. Shukla, M.C., Grewal, T.S., and Gupta, S.C. *Advanced Accounts*. Vol.-I. S. Chand & Co., New Delhi.
3. Maheshwari, S.N., and Maheshwari, S. K. *Financial Accounting*. Vikas Publishing House, New Delhi.
4. Lal, Jawahar., and Srivastava, Seema. *Financial Accounting Text & Problems*. Himalaya Publishing House, New Delhi.
5. Tulsian, P.C. *Financial Accounting*. Tata McGraw Hill, New Delhi
6. Jain, S.P., and Narang, K.L. *Financial Accounting*. Kalyani Pulishers, New Delhi.
7. Gupta, Nirmal. *Financial Accounting and Auditing*. Ane Books (P) Ltd, New Delhi.
8. Compendium of Statements and Standards of Accounting. The Institute of Chartered Accountants of India, New Delhi.
9. Elliott, Barry. and Elliott, Jamie. *Financial Reporting and Analysis*. Prentice Hall International.
10. Horngren, Charles T. *Introduction to Financial Accounting*. Pearson Education.

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - I
Paper BCH 1.3: BUSINESS LAWS

Duration: 3 hrs.

Objective: To impart basic knowledge of the important business laws along with relevant case laws.

Unit I: The Indian Contract Act, 1872
a) Contract – meaning, characteristics and kinds
b) Essentials of valid contract - Offer and acceptance, consideration, contractual capacity, free consent, legality of objects.
c) Void agreements
d) Discharge of contract – modes of discharge including breach and its remedies.
e) Contingent contracts
f) Quasi – contracts
g) Contract of Indemnity and Guarantee
h) Contract of Bailment
i) Contract of Agency

Unit II: The Sale of Goods Act, 1930
a) Contract of sale, meaning and difference between sale and agreement to sell.
b) Conditions and warranties
c) Transfer of ownership in goods including sale by non-owners
d) Performance of contract of sale
e) Unpaid seller – meaning and rights of an unpaid seller against the goods and the buyer.

Unit III: The Limited Liability Partnership Act, 2008
a) Salient Features of LLP
b) Difference between LLP and Partnership, LLP and Company
c) LLP Agreement
d) Nature of LLP
e) Partners and Designated Partners
f) Incorporation Document
g) Incorporation by Registration, Registered office of LLP and change therein
h) Change of name
i) Partners and their Relations
j) Extent and limitation of liability of LLP and partners
k) Whistle blowing
l) Taxation of LLP
m) Conversion of LLP
n) Winding up and dissolution

Unit IV: The Information Technology Act 2000
a) Definitions under the Act
b) Digital signature

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c) Electronic governance
d) Attribution, acknowledgement and dispatch of electronic records
e) Regulation of certifying authorities
f) Digital signatures certificates
g) Duties of subscribers
h) Penalties and adjudication
i) Appellate Tribunal
j) Offences

Suggested Readings:

1. Lee Reach. *Business Laws*. Oxford University Press, UK.
2. Singh, Avtar. *The Principles of Mercantile Law*. Eastern Book Company, Lucknow.
3. Tulsian, P.C. *Business Law*. Tata McGraw Hill, New Delhi.
4. Sharma, J.P., and Kanojia, Sunaina. *Business Laws*. Ane Books Pvt. Ltd., New Delhi.
5. Chadha, P.R. *Business Law*. Galgotia Publishing Company, New Delhi
6. Maheshwari & Maheshwari. *Business Law*. National Publishing House, New Delhi.
7. *Information Technology Rules 2000 with Information Technology Act 2000*. Taxmann Publications Pvt. Ltd., New Delhi.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - I
Paper BCH – 1.4(a): MICRO ECONOMICS

Duration: 3 hrs.

Objective: To acquaint the students with the concepts of microeconomics dealing with consumer behaviour and producer behaviour and also understand the behaviour of firms under different market structures.

Unit I: Consumer Behaviour and Elasticity of Demand
a. Basic demand and supply analysis;
b. Elasticity of demand: price, income and cross elasticity, point elasticity and arc elasticity, marginal revenue, average revenue and price elasticity of demand;
c. Ordinal utility analysis of consumer behaviour: Budget line and indifference curve, consumer equilibrium. Income consumption curve and Engel curve, Price consumption curve and derivation of demand curve, Income and Substitution Effects of a price change;
d. Consumers' Surplus;
e. Revealed Preference theory.

Unit II: Production and Cost
Total, average and marginal product curves, Three stages of production, Production isoquants, marginal rate of technical substitution, economic region of production, Isocost lines, optimal combination of resources, the expansion path, returns to scale.
Cost of Production: Concept of explicit costs, implicit costs and opportunity costs of production, derivation of short run and long run cost curves. Economies and Diseconomies of scale and the shape to the long run average cost.

Unit III: Perfect Competition
Assumptions, Equilibrium of the firm and the industry in the short run, Supply curve of firm and industry in the long run. Consumers' and Producers' Surplus and the efficiency of perfect competition. Welfare effects of an excise tax.

Unit IV: Monopoly
Monopoly short run and long run equilibrium. Shifts in demand curve and the absence of the supply curve. Measurement of monopoly power and the rule of thumb for pricing. Comparison of pure competition and monopoly and the social costs of monopoly power including deadweight loss. Degree of price discrimination.

Unit V: Imperfect Competition
Monopolistic competition: price and output decision in the short run and long run, monopolistic competition and economic efficiency.
Oligopoly and Interdependence: Cournot's duopoly model (with reaction curves), kinked demand curve model, dominant firm price-leadership model, centralized cartels. Prisoners' Dilemma.

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Suggested Readings:

1. Pindyck, R.S., Rubinfeld, D. L., and Mehta, P. L. *Microeconomics*. Pearson Education.
2. Salvatore, Dominick. *Principles of Microeconomics*. Oxford International Student Edition.
3. Gould, J.P., and Lazear, E.P. *Microeconomic Theory*. All India Traveller Bookseller, New Delhi.
4. Salvatore, D. Schaum's. *Outline of Theory and Problems of Microeconomic Theory*. McGraw-Hill International Edition.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - I
Paper BCH 1.4(b): INSURANCE AND RISK MANAGEMENT

Duration: 3 hrs.

Objective: To develop an understanding among students about identifying analyzing and managing various types of risk. Besides, the students will be in a position to understand principles of insurance and its usefulness in business, along with its regulatory framework.

Unit I:
Concept of Risk, Types of Risk, Managing Risk, Sources and Measurement of Risk, Risk Evaluation and Prediction. Disaster Risk Management, Risk Retention and Transfer.

Unit II:
Concept of Insurance, Need for Insurance, Globalization of Insurance Sector, Reinsurance, Co-insurance, Assignment. Endowment

Unit III:
Nature of Insurance Contract, Principle of Utmost Good Faith, Insurable Interest, proximit cause, contribution and subrogation, Indemnity, Legal Aspects of Insurance Contract, Types of Insurance, Fire and Motor Insurance, Health Insurance, Marine Insurance, Automobile Insurance.

Unit IV:
Control of Malpractices, Negligence, Loss Assessment and Loss Control, Exclusion of Perils, Actuaries, Computation of Insurance Premium.
Regulatory Framework of Insurance: Role, Power and Functions of IRDA, Composition of IRDA, IRDA Act'1999.

Suggested Readings:

1. George, E. Rejda. *Principles of Risk Management and Insurance*. Pearson Education.
2. Dorfman, Marks S. *Introduction to Risk Management and Insurance*. Pearson
3. All the three modules of Insurance and Risk Management by Institute of Chartered Accountants of India
4. Gupta. P.K. *Insurance and Risk Management*. Himalaya Publishing House.
5. Mishra, M. N. *Principles and Practices of Insurance*. S. Chand and Sons.
6. Dinsdale, W.A. *Elements of Insurance*. Pitaman.
7. Black, K. and H.D. Skipper, *Life and Health insurance*. Pearson Education
8. Crane, F. *Insurance Principles and Practices*. John Wiley and Sons, New York.
9. Vaughan, E. J. and Vaughan. T. *Fundamentals of Risk and Insurance*. Wiley & Sons
10. Hansell, D.S. *Elements of Insurance*. Macdonald& Evans Ltd.

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - II
Paper BCH 2.1: BUSINESS COMMUNICATION (In English)

Duration: 2 hrs.

Objective: To acquire skills in reading, writing, comprehension and communication, and also to use electronic media for business communication.

Unit I: Introduction
Nature, Process and Importance of Communication, Types of Communication (verbal & Non Verbal), Different forms of Communication. Barriers to Communication: Linguistic Barriers, Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational Barriers.

Unit II: Business Correspondence
Letter Writing, presentation, Inviting quotations, Sending quotations, Placing orders, Inviting tenders, Sales letters, claim & adjustment letters and social correspondence, Memorandum, Inter -office Memo, Notices, Agenda, Minutes, Job application letter, preparing the resume.

Unit III: Report Writing
Identify the types of reports, define the basic format of a report, identify the steps of report writing, write a report meeting the format requirements, determine the process of writing a report, importance of including visuals such as tables, diagrams and charts in writing report, apply citation rules (APA style documentation) in reports.

Unit IV: Business language and presentation
Importance of Business language, Vocabulary Words often confused, Words often misspelt, Common errors in English. Oral Presentation Importance, Characteristics, Presentation Plan, Power point presentation, Visual aids.

Unit V: Technology and Business Communication
Role, effects and advantages of technology in Business Communication like email, text messaging, instant messaging and modern techniques like video conferencing, social networking. Strategic importance of e-communication.

Suggested Readings:
1. Lesikar, R.V. & Flatley, M.E. *Basic Business Communication Skills for Empowering the Internet Generation.*Tata McGraw Hill Publishing Company Ltd, New Delhi.
2. Bovee, and Thill. *Business Communication Today. Pearson Education.*
3. Taylor, Shirley. *Communication for Business. Pearson Education.*
4. Locker and Kaczmarek. *Business Communication: Building Critical Skills.* TMH.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - II
Paper BCH – 2.2: CORPORATE ACCOUNTING

Duration: 3 hrs.

Objective: To acquire the conceptual knowledge of the corporate accounting and to understand the various techniques of preparing the accounting and financial statements.

Unit I: Accounting for Share Capital & Debentures
Issue, forfeiture and reissue of forfeited shares- concept & process of book building. Issue of rights and bonus shares. Buy back of shares. Redemption of preference shares. Issue and Redemption of Debentures.

Unit II: Final Accounts
Preparation of profit and loss account and balance sheet of corporate entities, excluding calculation of managerial remuneration. Disposal of company profits.

Unit III: Valuation of Goodwill and Valuation of Shares
Concepts and calculation - simple problem only.

Unit IV: Amalgamation of Companies
Concepts and accounting treatment as per Accounting Standard: 14 (ICAI) (excluding inter company holdings). Internal reconstruction: concepts and accounting treatment excluding scheme of reconstruction.

Unit V: Accounts of Holding Companies/Parent Companies
Preparation of consolidated balance sheet with one subsidiary company. Relevant provisions of Accounting Standard: 21 (ICAI).

Unit VI: Banking Companies
Difference between balance sheet of banking and non banking company; prudential norms. Asset structure of a commercial bank. Non-performing assets (NPA).

Unit VII: Cash Flow Statement
Preparation of cash flow statement as per Accounting Standard (AS): 3 (Revised) (ICAI): Indirect method only.

Note:
1. The relevant Indian Accounting Standards in line with the IFRS for all the above topics should be covered.
2. Any revision of relevant Indian Accounting Standard would become applicable immediately.

Suggested Readings:

1. Monga, J.R. *Fundamentals of Corporate Accounting*. Mayur Paper Backs, New Delhi.

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2. Maheshwari, S.N. and Maheshwari, S. K. *Corporate Accounting*. Vikas Publishing House, New Delhi.

3. Shukla, M.C., Grewal, T.S., and Gupta, S.C. *Advanced Accounts*. Vol.-II. S. Chand &Co., New Delhi.

4. Ahmed, Naseem. *Corporate Accounting*. ANE Books Pvt. Ltd., New Delhi.

5. Gupta, Nirmal. *Corporate Accounting*. Sahitya Bhawan, Agra.

6. Jain, S.P. and Narang, K.L. *Corporate Accounting*. Kalyani Publishers, New Delhi.

7. Compendium of Statements and Standards of Accounting. The Institute of Chartered Accountants of India, New Delhi.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - II
Paper BCH 2.3: CORPORATE LAWS

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Duration: 3 hrs.

Objective: To impart basic knowledge of the provisions of the Companies Act 2013 and the Depositories Act, 1996. Case studies involving issues in corporate laws are required to be discussed.

Unit I: Introduction
Administration of Company Law [including National Company Law Tribunal (NCLT), Appellate Tribunal (NCLAT), Special Courts]; characteristics of a company; common seal; lifting of corporate veil; types of companies including private and public company, government company, foreign company, one person company, small company, associate company, dormant company, producer company; association not for profit; illegal association; formation of company, promoters and their legal position, pre incorporation contract and provisional contracts; on-line registration of a company.

Unit II: Documents
Memorandum of association and its alteration, articles of association and its alteration, doctrine of constructive notice and indoor management, prospectus, shelf prospectus and red herring prospectus, misstatement in a prospectus; GDR; book building; issue, allotment and forfeiture of shares, calls on shares; public offer and private placement; issue of sweat capital; employee stock options; issue of bonus shares; transmission of shares, buyback and provisions regarding buyback; share certificate; D-Mat system; Membership of a company.

Unit III: Management and Meetings
Classification of directors, additional, alternate and adhoc director; women directors, independent director, small shareholders' director; director identity number (DIN); appointment, who can appoint a director, disqualifications, removal of directors; legal position, powers and duties; key managerial personnel, managing director, manager; meetings of shareholders and board; types of meeting, convening and conduct of meetings, requisites of a valid meeting; postal ballot, meeting through video conferencing, e-voting; committees of board of directors – audit committee, nomination and remuneration committee, stakeholders relationship committee, corporate social responsibility committee; prohibition of insider trading.

Unit IV: Dividends, Accounts, Audit
Provisions relating to payment of dividend, provisions relating to books of account, provisions relating to audit, auditors' appointment, rotation of auditors, auditors' report, secretarial standards and secretarial audit; on-line filing of documents, winding up - concept and modes of winding up.
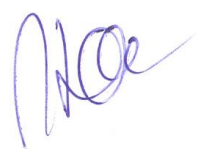
Unit V: The Depositories Act 1996
Definitions; rights and obligations of depositories; participants, issuers and beneficial owners; inquiry and inspections, penalties.

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Suggested Readings:

1. Hicks, Andrew & Goo S.H. *Cases and Material on Company Law*. Oxford University Press
2. Gowar, LCB. *Principles of Modern Company Law*. Stevens & Sons, London.
3. Majumdar, A.K., and Kapoor, G.K. *Company Law and Practice*. Taxmann, New Delhi
4. Hanningan, Brenda. *Company Law*. Oxford University Press, U.K.
5. Sharma, J.P. *An Easy Approach to Corporate Laws*. Ane Books Pvt. Ltd., New Delhi
1. Ramaiya. *A Guide to Companies Act*. LexisNexis Buttersworth wadhwa.
6. Kannal, S., & Sowrirajan, V.S. *Company Law Procedure*. Taxman's Allied Services (P) Ltd., New Delhi.
7. Singh, Harpal. *Indian Company Law*. Galgotia Publishing, Delhi.
8. *Companies Act and Corporate Laws*. Bharat Law House Pvt Ltd, New Delhi
9. The Depositories Act, 1996

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - II
Paper BCH 2.4(a): MACRO ECONOMICS

Duration: 3 hrs.

Objective: To provide the student with knowledge of basic concepts of the macro economics and modern tools of macro-economic analysis.

Unit I: Introduction
Concept and Variables of macroeconomics, Income, Expenditure and The Circular flow, Components of expenditure. Consumption, Saving and Investment and S-I approach, Multiplier (two sector) and Numerical. Static macro economic analysis short and the long run – Determination of supply, Determination of demand, and Conditions of equilibrium.

Unit II: Economy in the short run
Meaning, Objective and Instruments of fiscal and monetary policy, AD-AS approach; Determination of aggregate demand, Shifts in aggregate demand, Aggregate supply in the short and long run, and Aggregate demand- Aggregate supply analysis. Economy in the short run IS–LM framework.

Unit III: Inflation, Unemployment and Labour market
Inflation, Causes and Effect of rising and falling inflation, Demand pull and Cost push inflation and Measures to control inflation, Inflation and interest rates, Social costs of inflation. Unemployment – Natural rate of unemployment, Frictional and wait unemployment. Labour market and its interaction with production system. Phillips curve, Trade-off between inflation and unemployment, Sacrifice ratio, Role of expectations adaptive and rational.

Unit IV: Open Economy
Flows of goods and capital, Saving and Investment in a small and a large open economy, Exchange rates; Fixed and Flexible, Mundell – Fleming model with fixed and flexible prices in a Small Open economy with fixed and with flexible exchange rates, Interest rate differentials case of a Large economy. Balance of payments, Trade balance, Current and Capital Account, Autonomous and accommodating transactions and Measures to control disequilibrium on BOP.

Unit V: Behavioural Foundations
Behavioural Foundations- Investment – Determinants of business fixed investment, Effect of tax, Determinants of residential investment and Inventory investment. Demand for Money – Portfolio and transactions theories of demand for Real balances, Interest and Income Elasticities of demand for real balances. Supply of money.

Suggested Readings

1. Dornbusch, Rudiger., and Fischer, Stanley. *Macroeconomics*. McGraw-Hill.
2. Mankiw, N. Gregory. *Macroeconomics*. Macmillan Worth Publishers New York, Hampshire,U.K.

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3. Deepashree. *Macro Economics*. Ane Books Pvt. Ltd., New Delhi.
4. Salvatore, Dominick. *International Economics*. John Wiley & Sons Singapore.
5. Branson, William H. *Macroeconomic Theory and Policy*. HarperCollins India Pvt. Ltd.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - II
Paper BCH 2.4(b): INVESTING IN STOCK MARKETS

Duration: 3 hrs.

Objective: To provides basic skills to operate in stock market and the ways of investing in it. It will enable the student to take up investment in stock market independently.

Unit I: Investing Fundamentals

Types of Investment – Equity Shares, IPO/ FPO, Bonds. Indian Securities Market: the market participants, trading of securities, security market indices. Sources of financial information. Role of Stock Exchange, Stock exchanges in India: BSE, NSE, MCX. Buying and selling of stocks: using brokerage and analysts' recommendations. Use of limit order and market order.

Unit II: Stock Analysis and Valuation

Online trading of stocks. Understanding stock quotations, types and placing of order. Risk: its valuation and mitigation, Analysis of the company: financial characteristics (as explained by ratio analysis, future prospects of the company, assessing quality of management using financial and non-financial data, balance sheet and quarterly results, cash flows and capital structure). Comparative analysis of companies, Stock valuations: using ratios like PE ratio, PEG ratio, Price Revenue ratio. Use of Historic prices, simple moving average, basic and advanced interactive charts. Examining the shareholding patter of the company. Pitfalls to avoid while investing: high P/E stocks, low price stocks, stop loss, excess averaging.

Unit III: Investing in Mutual Funds

Background on Mutual Funds: Advantages of investing in Mutual funds. Motives of mutual fund investments, Net Asset Value, Types of Mutual funds: Open ended, close ended, equity, debt, hybrid, money market, Load vs. no load funds, Factors affecting choice of mutual funds. CRISIL Mutual Fund Ranking and its Usage.

Unit IV: Understanding Derivatives

Futures, Options, trading in futures and options. Understanding stock market quotes on futures and options. Types of orders, Put and Call options: How Put and Call options work. Commodities, Derivatives of commodities, trading of commodity derivatives on MCX, Currency derivatives and its trading.

Suggested Readings:

1. Gitman and Joehnk. *Fundamentals of Investing*. Pearson.
2. Madura, Jeff. *Personal Finance*. Pearson.
3. Chandra, Prasanna. *Investment Analysis and Portfolio Management*. Tata McGraw Hill.
4. Damodaran, Aswath. *Investment Valuation: Tool and Techniques for Determining the Value of Any Asset.* Wiley Finance.
5. Bodie, Alex., Marcus and Mohanty. *Investments*. McGraw Hill Publishing Co.

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6. Hirt and Block. *Fundamentals of Investment Management*. McGraw Hill Publishing Co.
7. Pandiyan, Punithavathy. *Security Analysis and Portfolio Management*. Vikas Publications
8. www.yahoofinance.com
9. www.moneycontrol.com
10. www.bloomberg.com

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - III
Paper BCH 3.1: HUMAN RESOURCE MANAGEMENT

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Duration: 3 hrs.

Objective: To acquaint students with the techniques and principles to manage human resource of an organisation.

Unit I: Human Resource Management

Concept and functions; Role, status and competencies of HR manager; HR policies; Evolution of HRM; Emerging challenges of human resource management - Workforce diversity, empowerment, downsizing, VRS, work life balance.

Unit II: Acquisition of Human Resource

Human resource planning- Quantitative and qualitative dimensions; Job analysis – Job description and job specification; Recruitment – concept and sources; Selection – concept and process; Test and interview; Placement, induction and socialization; Retention.

Unit III: Training and Development

Concept and importance; Role specific and competency based training; Training and development methods – Apprenticeship, understudy, job rotation, vestibule training, case study, role playing, sensitivity training, In-basket, management games, conferences and seminars, coaching and mentoring, management development programs; Training process outsourcing.

Unit IV: Performance Appraisal and Compensation Management

Performance appraisal- Nature, objectives and process; Performance management; Methods of performance appraisal; Potential appraisal; Employee counselling; Job changes - Transfers and promotions, Human resource audit;

Compensation - Concept and policies, Base and supplementary compensation; Individual, group and organization incentive plans; Fringe benefits; Performance linked compensation; Employee stock option; Pay band compensation system; Job evaluation.

Unit V: Maintenance of employees and Emerging Horizons of HRM

Employee health and safety; Employee welfare; Social security (excluding legal provisions); Employer-employee relations- An overview; Grievance handling and redressal; Industrial disputes: Causes and settlement machinery; e-HRM; Human Resource Information System and e-HRM; Impact of HRM practices on organisational performance; HR audit, Contemporary issues in human resource management.

Suggested Readings

1. Mondy, A. W., and Noe, R. M. *Human Resource Management.* Pearson Education.
2. Decenzo, D.A., and Robbins, S. P. *Fundamentals of Human Resource Management.* Wiley, India.
3. Dessler, G., and Varkkey, B. *Human Resource Management.* Pearson Education, Delhi.

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4. Chhabra, T.N. *Human Resource Management.* Dhanpat Rai & Co., Delhi.
5. Aswathappa, K. *Human Resource Management.* Tata McGraw-Hill, New Delhi.
6. French, W. L. *Human Resource Management.* Haughten Miffin, Boston.
7. Gupta, C.B. *Human Resource Management.* Sultan Chand & Sons, Delhi.
8. Rao, V. S. P. *Human Resource Management: Text and Cases.* Excel Books.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - III
Paper BCH 3.2: INCOME TAX LAW AND PRACTICE

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Duration: 3 hrs.   **Lectures/Practical Lab**

Objective: To provide basic knowledge and equip students with application of principles and provisions of Income-Tax Act, 1961.

Unit I: Introduction
Basic concepts: Income, agricultural income, person, assessee, assessment year, previous year, gross total income, total income, maximum marginal rate of tax; Permanent Account Number (PAN)
Residential status; Scope of total income on the basis of residential status
Exempted income under section 10

Unit II: Computation of Income under different heads-1
Income from Salaries; Income from house property

Unit III: Computation of Income under different heads-2
Profits and gains of business or profession; Capital gains; Income from other sources

Unit IV: Computation of Total Income and Tax Liability
Income of other persons included in assessee's total income; Aggregation of income and set-off and carry forward of losses; Deductions from gross total income; Rebates and reliefs Computation of total income of individuals and firms; Tax liability of an individual and a firm; Five leading cases decided by the Supreme Court

Unit 5: Preparation of Return of Income   **Practical Lab**
Filing of returns: Manually, On-line filing of Returns of Income & TDS; Provision & Procedures of Compulsory On-Line filing of returns for specified assesses.

There shall be a practical examination of 20 Marks on E-filling of Income Tax Returns using a software utility tool. The student is required to fill appropriate Form and generate the XML file.

Suggested readings:

1. Singhania, Vinod K., and Singhania, Monica. *Students' Guide to Income Tax, University Edition.* Taxmann Publications Pvt. Ltd., New Delhi.
2. Ahuja, Girish., and Gupta, Ravi. *Systematic Approach to Income Tax.* Bharat Law House, Delhi.
3. Pagare, Dinkar. *Law and Practice of Income Tax.* Sultan Chand and Sons, New Delhi.
4. Lal, B.B. *Income Tax Law and Practice.* Konark Publications, New Delhi.

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Journals

1. *Income Tax Reports*. Company Law Institute of India Pvt. Ltd., Chennai.
2. *Taxman*. Taxman Allied Services Pvt. Ltd., New Delhi.
3. *Current Tax Reporter*. Current Tax Reporter, Jodhpur.

Software

1. Excel Utility available at *incometaxindiaefiling.gov.in*

Note: Latest edition of text books and Software may be used

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B.Com. (Hons.): Semester - III
Paper BCH 3.3: MANAGEMENT PRINCIPLES AND APPLICATIONS

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Duration: 3 hrs.

Objective: To provide the student with an understanding of basic management concepts, principles and practices.

Unit I: Introduction
1.1 Concept: Need for study; Managerial functions – An overview; Coordination – Essence of management.
1.2 Evolution of Management Thought: Classical approach – Taylor, Fayol, Neo classical and Human relations approach – Hawthorne experiments, Behavioural approach, Systems approach, Contingency approach, MBO, Re-engineering, Five-force analysis, Learning Organisation, Fortune at the Bottom of Pyramid.
1.3 Trends and Challenges of Management in Global Scenario, Emerging issues in management.

Unit II: Planning
2.1 Types of Plan – An overview.
2.2 Strategic planning – Concept, process, Importance and limitations; Growth strategies – internal and external.
2.3 Environmental analysis and diagnosis (Internal and external environment) – Definition, Importance and Techniques (SWOT/TOWS/WOTS-UP, BCG Matrix, Competitor Analysis), Business environment - Concept and components.
2.4 Decision-making – Concept, importance, group decision making, Individual versus group decision making, Decision making process, perfect rationality and bounded rationality, techniques (qualitative and quantitative, MIS, DSS).

Unit III: Organising
3.1 Concept.
3.2 Process of organizing – An overview, span of management, different types of authority (line, staff and functional), decentralization, delegation.
3.3 Formal and informal organization.
3.4 Principles of organizing.
3.5 Types of organization structure.

Unit IV: Staffing and Directing
4.1 Concept of staffing - Recruitment and Selection; Orientation; Training and Development; Career Development; Performance Appraisal.
4.2 Motivation – Concept, importance, intrinsic and extrinsic motivation; Major motivation theories - Maslow's need hierarchy theory, Hertzberg's two factor theory, McGregor's Theory X and Theory Y, Ouchi's Theory Z.
4.3 Leadership – Concept, importance; Major theories of leadership (Likert's scale theory, Blake and Mouton's Grid theory, House's path goal theory, Fred Fielder's situational leadership), Transactional leadership, Transformational leadership, Transforming leadership.

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4.4 Communication – Concept, purpose, process; Oral and written communication; Formal and informal communication networks; Barriers to communication, overcoming barriers to communication.

Unit V: Control

5.1 Concept, process, limitation, principles of effective control, Major techniques of control - Ratio analysis (ROI), budgetary control, EVA, MVA, PERT, and CPM.

Suggested Readings:

2. Koontz, H. and Weihrich, H. *Essentials of Management.* Pearson Education.
3. Robbins, S. and Coulter. M.*Management.* Pearson Education.
4. Robbins, S. P., Decenzo, D.A., Bhattacharya, S. and Agrawal, M.M. *Fundamentals of Management: Essentials, Concepts and Applications.* Pearson Education.
5. Drucker P. F. *Practice of Management.* Mercury Books, London.
6. Chhabra, T.N. *Essentials of Management.* Sun India.
7. Griffin, R.W. *Management Principles and Application.* Cengage Learning
8. Luthans, F. *Introduction to Management.* McGraw Hill.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - III
Paper BCH – 3.4(a): BUSINESS STATISTICS

Duration: 3 hrs.   Lectures/Practical Lab

Objective: To familiarize students with the basic statistical tools used to summarize and analyze quantitative information for decision making.

Unit I: Statistical Data and Descriptive Statistics
1.1 Measures of Central Tendency
a) Mathematical averages including arithmetic mean, geometric mean and harmonic mean. Properties and applications.
b) Positional Averages:
Mode and Median (and other partition values including quartiles, deciles, and percentiles) (including graphic determination)
1.2 Measures of Variation: absolute and relative.
Range, quartile deviation, mean deviation, standard deviation, and their coefficients, Properties of standard deviation/variance
1.3 Moments: Calculation and significance, Skewness: Meaning, Measurement using Karl Pearson and Bowley's measures; Concept of Kurtosis

Unit II: Probability and Probability Distributions
2.1 Theory of Probability. Approaches to the calculation of probability
2.2 Calculation of event probabilities. Addition and multiplication laws of probability (Proof not required)
2.3 Conditional probability and Bayes' Theorem (Proof not required)
2.4 Expectation and variance of a random variable
2.5 Probability distributions:
(a) Binomial distribution: Probability distribution function, Constants, Shape, Fitting of binomial distribution
(b) Poisson distribution: Probability function, (including Poisson approximation to binomial distribution), Constants, Fitting of Poisson distribution
(c) Normal distribution: Probability distribution function, Properties of normal curve, Calculation of probabilities.

Unit III: Simple Correlation and Regression Analysis
3.1 Correlation Analysis. Meaning of Correlation: simple, multiple and partial; linear and non-linear, Correlation and Causation, Scatter diagram, Pearson's co-efficient of correlation; calculation and properties (proofs not required). Correlation and Probable error; Rank Correlation
3.2 Regression Analysis. Principle of least squares and regression lines, Regression equations and estimation; Properties of regression coefficients; Relationship between Correlation and Regression coefficients; Standard Error of Estimate

Unit IV: Index Numbers
4.1 Meaning and uses of index numbers. Construction of index numbers: fixed and chain

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base: univariate and composite. Aggregative and average of relatives – simple and weighted

4.2 Tests of adequacy of index numbers, Base shifting, splicing and deflating. Problems in the construction of index numbers

4.3 Construction of consumer price indices. Important share price indices, including BSE SENSEX and NSE NIFTY

Unit V: Time Series Analysis

5.1 Time Series Data; Components of time series. Additive and multiplicative models

5.2 Trend analysis. Fitting of trend line using principle of least squares – linear, second degree parabola and exponential. Conversion of annual linear trend equation to quarterly/monthly basis and vice-versa; Moving averages

5.3 Seasonal variations- Calculation of Seasonal Indices using Simple averages, Ratio-to-trend, and Ratio-to-moving averages methods. Uses of Seasonal Indices

UNIT VI: Sampling Concepts, Sampling Distributions and Estimation

Populations and samples, Parameters and Statistics, Descriptive and inferential statistics. Sampling methods including Simple Random sampling, Stratified sampling, Systematic sampling, Judgement sampling and Convenience sampling.

Concept of Sampling distributions and Theory of Estimation: Point and Interval estimation of means (large samples) and proportions.

Practical Lab

The students will be familiarized with software (Spreadsheet and/or SPSS) and the statistical and other functions contained therein related to formation of frequency distributions and calculation of averages, measures of Dispersion and variation, correlation and regression co-efficient.

Suggested Readings:

1. Levin, Richard, David S. Rubin, Rastogi, and Siddiqui. *Statistics for Management*. Pearson Education.
2. Berenson and Levine. *Basic Business Statistics: Concepts and Applications*. Pearson Education.
3. Siegel, Andrew F. *Practical Business Statistics*. McGraw Hill.
4. Vohra, N. D. *Business Statistics*. McGraw Hill.
5. Spiegel, M.D. *Theory and Problems of Statistics*. Schaum's Outlines Series. McGraw Hill Publishing Co.
6. Gupta, S.P., and Gupta, Archana. *Statistical Methods*. Sultan Chand and Sons, New Delhi.
7. Gupta, S.C. *Fundamentals of Statistics*. Himalaya Publishing House.
8. Anderson, Sweeney and William. *Statistics for Students of Economics and Business*. Cengage Learning.
9. Thukral J. K. *Business Statistics.Taxmann*

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - III
Paper BCH – 3.4(b): PROJECT MANAGEMENT

Duration: 3 hrs.

Objective: To enable the student to evolve a suitable framework for the preparation, appraisal, monitoring and control and hedge risk of industrial project.

Unit I: Introduction
Objectives of Project Planning, monitoring and control of investment projects. Relevance of social cost benefit analysis, identification of investment opportunities. Pre-feasibility studies.

Unit II: Project Preparation
Technical feasibility, Marketing Feasibility and Technical Feasibility, estimation of costs, demand analysis and commercial viability, risk analysis, collaboration arrangements; financial planning; Estimation of fund requirements, sources of funds. Loan syndication for the projects. Tax considerations in project preparation and the legal aspects.

Unit III: Project Appraisal
Business criterion of growth, liquidity and profitability, social cost benefit analysis in public and private sectors, investment criterion and choice of techniques. Estimation of shadow prices and social discount rate.

Unit IV: Issues in Project Planning and Management
Cost and Time Management issues in Project planning and management.

Suggested Readings:

1. Chandra, Prasanna. *Project Preparation Appraisal and Implementation*. Tata McGraw Hill.
2. Gray, Clifford F., Larson, Eric W., and Desai, Gautam V. *Project management: The managerial process*. McGraw Hill Education
3. Khatua, Sitangshu. *Project Management and Appraisal*. Oxford University Press
4. Gido, Jack,. and Clements, James P. *Project Management*. Cengage Learning

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - III
Paper – BCH 3.5(a): E-COMMERCE

Duration: 2 hrs.

Objective: To enable the student to become familiar with the mechanism for conducting business transactions through electronic means

Unit I: Introduction:
Meaning, nature, concepts, advantages, disadvantages and reasons for transacting online, types of E-Commerce, e-commerce business models (introduction , key elements of a business model and categorizing major E-commerce business models), forces behind e-commerce.
Technology used in E-commerce: The dynamics of world wide web and internet(meaning, evolution and features) ; Designing, building and launching e-commerce website (A systematic approach involving decisions regarding selection of hardware, software, outsourcing vs. in-house development of a website)

Unit II: Security and Encryption:
Need and concepts, the e-commerce security environment: (dimension, definition and scope of e-security), security threats in the E-commerce environment (security intrusions and breaches, attacking methods like hacking, sniffing, cyber-vandalism etc.), technology solutions (Encryption, security channels of communication, protecting networks and protecting servers and clients).

Unit III: Website designing   Practical Lab
Introduction to HTML; tags and attributes: Text Formatting, Fonts, Hypertext Links, Tables, Images, Lists, Forms, Frames, Cascading Style Sheets.

Unit IV: E-payment System: Lectures/Practical Lab
Models and methods of e–payments (Debit Card, Credit Card, Smart Cards, e-money), digital signatures (procedure, working and legal position), payment gateways, online banking (meaning, concepts, importance, electronic fund transfer, automated clearing house, automated ledger posting), risks involved in e-payments.

Unit V: On-line Business Transactions: Lectures/Practical Lab
Meaning, purpose, advantages and disadvantages of transacting online, E-commerce applications in various industries like {banking, insurance, payment of utility bills, online marketing, e-tailing (popularity, benefits, problems and features), online services (financial, travel and career), auctions, online portal, online learning, publishing and entertainment} Online shopping (amazon, snapdeal, alibaba, flipkart, etc.)

Unit VI: Security and Legal Aspects of E-Commerce
Threats in E-Commerce, Security of Clients and Service-Provider; Cyber Laws – Relevant provisions of Information Technology Act 2000, offences, secure electronic records and digital signatures penalties and adjudication.

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Note:

i) There shall be 3 Credit Hrs. for lectures + One Credit hr. (2 Practical periods per week per batch) for Practical Lab

Suggested Readings

1. Agarwala, Kamlesh N., Lal, Amit., and Agarwala, Deeksha. *Business on the Net: An Introduction to the Whats and Hows of E –Commerce*. Macmillan India Ltd.
2. Bajaj, Deobyani Nag. *E-Commerce*. Tata McGraw Hill Company, New Delhi.
3. Turban, E., et. al. *Electronic commerce: A Managerial Perspective*. Pearson Education Asia.
4. Diwan, Prag., and Sharma, Sunil. *Electronic Commerce -A Manager's Guide to E-Business*. Vanity Books International, Delhi.
5. Dietel, Harvey M., Dietel, Paul J., and Kate Steinbuhler. *E-business and E-commerce for managers*. Pearson Education.
6. Greenstein, M. and T.M. Feinman. *Electronic Commerce: Security, Risk Management and Control*. Tata McGraw hill.
7. Kosiur, David, *Understanding Electronic Commerce*. Prentice Hall of India Private Ltd., New Delhi.
8. Whiteley, David. *E-commerce*. McGraw Hill, New York.

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - III
Paper BCH 3.5(b): TRAINING AND DEVELOPMENT

Duration: 2 hrs.

Objective: To train the students to understand the learning environment of a firm. The knowledge so obtained will make them capable of providing training to Human Resource of a business firm.

Unit1: Introduction
Concept and functions of Human resource management; Essence of training and development in human resource management.
Training and learning: Concept of training and learning, the learning process, learning curve, principles of learning, training guidelines, experience versus training, kinds of training, system approach to training, programmed instruction, transfer of training.

Unit II: Training Needs Assessment and Curriculum Development
Identification of Training and Development needs, training needs assessment-various approaches (the job and the Individual), Advantages and disadvantages of basic needs assessment techniques, Assessing curriculum needs, curriculum standards, matching organisational training needs, Developing training materials.

Unit III: Training Methods
Three Stages of training (Preparatory, implementation and followup stage), On the job and off-the job methods, experiential versus non-experiential methods.

Unit IV: Evaluation of Training and Development, and Emerging Pattern
Reasons of evaluating training, Criteria for evaluation, problems of evaluation, steps involved in evaluation, methods for training evaluation, analysis and costing of training. Emerging Pattern of Training and development in India. Two Indian case studies to be discussed in the class.

Suggested Readings:

1. Prior, John. *Handbook of Training and Development*, Jaico Publishing House,Bombay.
2. Donald,F. Michalak and Edwin, G. Yager. *Making the Training Process Work*. Harper and Row, New York.
3. Phillips, Jack J. Handbook of Training Evaluation and Measurement Methods, Houston, Gulf Publishing Co.
4. Lynton, R. and Pareek, U. *Training for Development*. Vistaar, New Delhi

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - III
Paper BCH 3.5(c): E-MARKETING

Duration: 2 hrs.

Objective: This course aims at providing the knowledge of concept, tools and techniques of E-marketing.

Unit I: Introduction

Concept, nature and importance of marketing; Basics of market segmentation and targeting. An overview of marketing decisions.

Concept and nature of e marketing, E-marketing versus traditional marketing; Issues, challenges and opportunities for e-marketing; Reasons for growth of e-marketing; Tools and techniques of e-marketing–advantages and disadvantages; e-marketing situations.

Unit II: E-Marketing Management

Segmentation, targeting and positioning; E-marketing mix; E-marketing and customer relationship management – concept and scope; E-customers and their buying process; E-marketing and customer loyalty and satisfaction; Communities and social networks.

Unit III: Internet Marketing

Concept and role of internet marketing; Web site design and domain name branding; Search engine optimization – functions, type of traffic, keywords and steps in search engine optimization; Internet advertising – types and tracking ROI; Online PR, News and reputation Management; Direct marketing –scope and growth; E-mail marketing; Social media marketing: Concept and tools; Blogging – benefits, types; Video-marketing for business purpose –tools and techniques; Pay per click marketing; Issues and challenges.

Suggested Readings:

1. Strauss, Judy., and Raymond Frost. *E-Marketing*. Prentice Hall.
2. Hanson, Ward A., *Principles of Internet Marketing*. South Western College Pub. Division of Thomson Learning.
3. Chaffey, D. F., Chadwick, Ellis., Mayer, R., and K. Johnston. *Internet marketing: Strategy, Implementation and Practice*. Prentice Hall.
4. Hanson, W.A., and K. Kalyanam. *Internet marketing & e-commerce*. South-Western College Pub.
5. Fill, Chris. *Marketing Communication: Interactivity, Communities and Content*. Financial Times Prentice Hall.
6. Scott, David Meerman. *New Rules of Marketing and PR*. John Wiley & Sons.
7. Ryan, Damian., and Jones, Calvin. *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. Koganpage Publishers.

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - III
Paper BCH 3.5(d): PERSONAL TAX PLANNING

Duration: 2 hrs.

Objective: To provide basic knowledge of income tax and wealth tax laws to non-commerce students in easily comprehensible manner with a view to equip them to use the legitimate tool of tax planning in their economic life.

Unit I: Concept of tax planning
Meaning of tax planning, tax avoidance and tax evasion; objective of tax planning. Basic framework of Income tax law; meaning of a few frequently used terms like assesse, previous year, assessment year, Gross total income, Total taxable income, deduction, exemption.

Unit II: Tax planning relating to residential status and to agricultural income
Tax Planning with reference to Residential status - Relevance of residential status in computing taxable income, Determination of Residential status of an individual, Relationship between residential status and incidence of tax, Area of Tax Planning – Case Study
Provisions in brief relating to concept of agricultural income and tax treatment of agricultural income

Unit III: Tax Planning with Reference to Salary Income
Summarized provisions relating to computation of income under the head salary. Taxation of present benefits: Bonus, Fees and Commission, Meaning, Types and tax Implications of allowances, Meaning, types , Valuation and tax Implication of perquisites, Allowances vs. Perquisites, Terminal benefits like gratuity, leave encashment, commuted pension, tax relief u/s 89(1)
Case studies based on designing pay package

Unit IV: Planning with Reference to Wealth Tax
Wealth tax provisions in brief; Incidence of Tax liability; Valuation of Immovable Property; Computation of Tax Liability; Area of tax planning – case study

Suggested Readings

1. Singhania, Vinod K., Singhania, Kapil., and Monica Singhania. *Direct Taxes Planning and Management.* Taxmann Publications Pvt. Ltd., New Delhi.
2. Ahuja, Girish., and Gupta, Ravi. *Corporate Tax Planning and Management.* Bharat Law House, Delhi.
3. Goyal, S.P. *Direct Tax Planning.* Sahitya Bhawan publication, Agra.
4. Acharya, Shuklendra., and Gurha, M.G. *Tax Planning under Direct Taxes.* Modern Law Publication, Allahabad.

Note: Latest edition of text books may be used. Relevant Finance Act and Finance Rules, and articles by tax consultants in leading newspapers such as Economic Times and Financial Express may also be referred.

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B.Com. (Hons.): Semester - IV
Paper BCH 4.1: COST ACCOUNTING

Duration: 3 hrs.

Objective: To acquaint the students with basic concepts used in cost accounting and various methods involved in cost ascertainment systems and use of costing data for planning, control & decision-making.

Unit I: Introduction
Meaning, objectives and advantages of cost accounting, Difference between financial, cost, and management accounting. Cost concepts and classifications, Elements of cost, Installation of costing system; Role of a cost accountant in an organization.

Unit II: Elements of Cost: Material and Labour
a. *Materials*: Material/inventory control techniques. Accounting and control of purchases, storage and issue of materials. Methods of pricing of materials issues — FIFO, LIFO, Simple Average, Weighted Average, Replacement, Standard Cost. Treatment of Material Losses
b. *Labour*: Accounting and Control of labour cost. Time keeping and time booking. Concept and treatment of idle time, over time, labour turnover and fringe benefits. Methods of wage payment and the Incentive schemes- Halsey, Rowan, Taylor's Differential piece wage.

Unit III: Elements of Cost: Overheads
Classification, allocation, apportionment and absorption of overheads; Under- and over-absorption; Capacity Levels and Costs; Treatments of certain items in costing like interest on capital, packing expenses, bad debts, research and development expenses; Activity based cost allocation.

Unit IV: Methods of Costing
Unit costing, Job costing, Contract costing, Process costing (process losses, valuation of work in progress, joint and by-products), Service costing (only transport).

Unit V: Cost Accounting Systems
Integral and non-integral systems; Reconciliation of cost and financial accounts

Suggested Readings:
1. Lal, Jawahar., and Srivastava, Seema. *Cost Accounting*. McGraw Hill Publishing Co., New Delhi.
2. Nigam, B.M. Lall., and Jain, I.C. *Cost Accounting: Principles, Methods and Techniques*. PHI Pvt. Ltd, New Delhi.
3. Banerjee, Bhabatos. *Cost Accounting –Theory and Practice*. PHI Pvt. Ltd, New Delhi.
4. Jhamb, H. V. *Fundamentals of Cost Accounting*. Ane Books Pvt Ltd, New Delhi.
5. Arora, M. N. *Cost Accounting – Principles and Practice*. Vikas Publishing House, New Delhi.
6. Shukla, M.C., Grewal, T.S., and Gupta, M P. *Cost Accounting, Text and Problems*. S. Chand & Co. Ltd., New Delhi.

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7. Jain, S.P., and Narang, K. L. *Cost Accounting, Principles and Methods*. Kalyani Publishers, Jalandhar.
8. Maheshwari, S. N., & Mittal, S.N. *Cost Accounting, Theory and Problems*. Shri Mahabir Book Depot, New Delhi.

Note: Latest edition of text books may be used.

Paper BCH 4.2: BUSINESS MATHEMATICS

Duration: 3 hrs.

Objective: To familiarise the students with the basic mathematical tools with emphasis on applications to business and economic situations.

Unit I: Matrices and Determinants
1.1 Algebra of matrices. Inverse of a matrix, Matrix Operation – Business Application
1.2 Solution of system of linear equations (having unique solution and involving not more than three variables) using matrix inversion Method and Cremer's Rule, The Leontief Input Output Model (Open Model Only).

Unit II: Calculus I
2.1 Mathematical functions and their types- linear, quadratic, polynomial, exponential, logarithmic and logistic function. Concepts of limit, and continuity of a function.
2.2 Concept and rules of differentiation, Maxima and Minima involving second or higher order derivatives.
2.3 Concept of Marginal Analysis, Concept of Elasticity, Applied Maximum and Minimum Problems including effect of Tax on Monopolist's Optimum price and quantity, Economic Order Quantity.

Unit III: Calculus II
3.1 Partial Differentiation. Partial derivatives up to second order. Homogeneity of functions and Euler's theorem. Total differentials. Differentiation of implicit functions with the help of total differentials.
3.2 Maxima and Minima in cases of two variables involving not more than one constraint including the use of the Lagrangean multiplier.
3.3 Integration. Standard forms. Methods of integration – by substitution, by parts and by use of partial fractions. Definite integration. Finding areas in simple cases.
3.4 Application of Integration to marginal analysis. Consumer's and Producer's Surplus, Rate of Sales; the Learning Curve.

Unit IV: Mathematics of Finance   Lecture/Practical Lab
4.1 Rates of interest-nominal, effective– and their inter-relationships in different compounding situations.
4.2 Compounding and discounting of a sum using different types of rates.
4.3 Types of annuities, like ordinary, due, deferred, continuous, perpetual, and their future and present values using different types of rates of interest. Depreciation of Assets. Valuation of simple loans and debentures. Sinking Fund.
(*General annuities to be excluded*)

Unit V: Linear Programming   Lectures/ Practical Lab
5.1 Formulation of linear programming problems (LPP). Graphical solution to LPPs. Cases of unique and multiple optimal solutions. Unbounded solutions, infeasibility, and redundant

constraints.

5.2 Solution to LPPs using Simplex method – maximization and minimization cases. Shadow prices of the resources. Identification of unique and multiple optimal solutions, unbounded solution, infeasibility and degeneracy.

5.3 The dual problem: Formulation of the Dual, Primal- Dual Solutions: (Excluding solution of dual problem when the primal problem involves mixed constraints).Economic interpretation of the dual.

Note: In addition the students will work on a software package for solving linear programming problems and analyze the results obtained there from. This will be done through internal assessment.

Suggested Readings:

1. Anthony, M., and Biggs, N. *Mathematics for Economics and Finance*. Cambridge University Press.
2. Ayres, Frank Jr. *Theory and Problems of Mathematics of Finance*. Schaum's Outlines Series. McGraw Hill Publishing Co.
3. Budnick, P. *Applied Mathematics*. McGraw Hill Publishing Co.
4. Dowling, E.T. *Mathematics for Economics*, Schaum's Outlines Series. McGraw Hill Publishing Co.
5. Mizrahi and Sullivan, John. *Mathematics for Business and Social Sciences*. Wiley and Sons.
6. Wikes, F.M. *Mathematics for Business, Finance and Economics*. Thomson Learning.
7. Prasad, Bindra., and Mittal, P.K. *Fundamentals of Business Mathematics*. Har-Anand Publications.
8. Thukral, J.K. *Business Mathematics*. Mayurpaper backs
9. Vohra, N.D. *Quantitative Techniques in Management*. Tata McGraw Hill Publishing Company.
10. Soni, R.S. *Business Mathematics*. Pitambar Publishing House.
11. Singh J. K. *Business Mathematics*. Himalaya Publishing House.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - IV
Paper BCH 4.3: COMPUTER APPLICATIONS IN BUSINESS

Duration: 3 hrs.

Objective: To provide computer skills and knowledge for commerce students and to enhance the student understands of usefulness of information technology tools for business operations.

Unit I: Introduction

Introduction to Computer-Characteristics of Computers, The Computer System, Parts of Computers); Computer H/W Setup, Configuration, Networking, Mobile H/W Device and types wireless Networking; Operating System- Introduction to Operating Systems, An overview of various Computer & Mobile OS & Application (UN IX / Linux, DOS, Windows, Android, windows mobile, iOS Like), Features of latest Windows Operating Systems & its Management & Networking (Installation, backup, security, User control), Usage of payment gateways.

Unit II: Introduction to essential tools
Lectures/ Practical Lab

Introduction to facilities & commonly used features of:

a) **Word:** Working with word document, Inserting, filling and formatting a table, Mail Merge including linking with Access Database, Creating Macros -Sending E-mail from Word Import / Export of files Converting Word Document to Web Document, PDF files Hyperlinks; OLE Security features in MS-Word - Protection of Documents - Password for Documents - Checking for viruses in macros, referencing, creating bibliography, manage sources and citations, review documents.

b) **PowerPoint:** Preparing Presentations, Slides, Handouts, Speaker's Notes - Outlines - Media Clips - Charts – Graphs, Adding the Transitions to the Slide Show - Special effects in detail, - Setting Slide timings.

c) **Spreadsheet:** Creating a work book, Rearranging Worksheet, Organizing Charts and graphs, Ranges and Functions & Formulae: Mathematical, Statistical Financial Functions such as NPV (Net present value), Future value, IRR (Internal Rate of Return), EMI (Equated Monthly Installments, Compounding Yearly, periodic and monthly) - Auto Calculate Using Names in a Formula, Formula Editing, Consolidation of Data & Data Analysis - Sorting List, Filter & More Filtering Techniques - Consolidate data in multiple worksheets - What-if analysis, Goal Seek Scenario Manager, Solver, Lookup Function - Sub Totals, Nested-IF, Statistical Analysis; Data Validation & Protection - Create a drop-down list from a range of cells - Apply data validation to cells - Copy data validation setting, remove data validation - Find cell that have data validation, protect cell data, using password to protect sheet and workbook. - Use validation to create dependent list; Pivot table Reports & Pivot Chart Reports.

Unit III: Using Spreadsheet for Data Analysis & Reporting Features:
Lectures, Practical Lab

Using spreadsheet for following purposes and making reports: Loan & Lease statement, Ratio Analysis, Payroll statements, Capital Budgeting, Depreciation Accounting, Graphical representation of data, Frequency distribution and its statistical parameters, Correlation and Regression

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Unit IV: Database Designs for Accounting and Business Applications

Lectures, Practical Lab

Reality- Expressing the Application; Creating Initial design in Entity Relationship(ER) Model; Transforming ER Model to Relational data model concepts; Implementing RDM design using an appropriate DBMS.

SQL and Retrieval of Information: Basic Queries in SQL; Embedded Queries in SQL; Insert, Delete and Update statements in SQL

DBMS Software: Environment; Tables; Forms; Queries; Reports; Modules; Applying DBMS in the areas of Accounting, Inventory, HRM and its accounting, Managing the data records of Employees, Suppliers and Customers.

Unit V: CAAT Tools

Lectures, Practical Lab

Capabilities & Importing Data from Accounting & other Application Systems - An Introduction; Analytical Reports, Duplicates/ Gaps. Sorting & Charting; Stratification, Summarization, Statistics & Aging - An Introduction; Sampling, Macros and Audit Trail.

Suggested Readings:

1. Rajaraman,V. *Introduction to Information Technology*. PHI.
2. Eliason, A.L. *On-line Business Computer-Application Science Research Associates* Chicago.
3. Leon, A., and Leon, M. *Fundamentals of Information Technology*. Leon. Vikas (4) Software manuals.
4. Sinha, Pradeep K., and Sinha, Preeti. *Foundation of Computing*. BPB Publication.
5. Basandra, Suresh K., *Management Information System*. Wheeler Publication, New Delhi-Allahabad.
6. Kumar, Muneesh. *Business Information System*. Vikas Publishing House.
7. Eliason, A. L. *On-line Business Computer Applications*, Science Research Associates, Chicago.
8. Fizgerald & Dennis. *Business Data Communication and Networking*. Wiley

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - IV
Paper BCH 4.4(a): INDIAN ECONOMY

Duration: 3 hrs.

Objective: To acquaint the students with the policy regimes, structure and sectoral trends of Indian economy.

Unit I: Basic Issues in Economic Development
Concept and Measures of Development and Underdevelopment; Human Development.

Unit II: Basic Features of the Indian Economy at Independence
Composition of national income and occupational structure, the agrarian scene and industrial structure.

Unit III: Policy Regimes
a) The evolution of planning and import substituting industrialization.
b) Economic reform and liberalization.

Unit IV: Growth, Development and Structural Change
a) The experience of Growth, Development and Structural Change in different phases of growth and policy regimes across sectors and regions.
b) The Institutional Framework: Patterns of assets ownership in agriculture and industry; Policies for restructuring agrarian relations and for regulating concentration of economic power;
c) Changes in policy perspectives on the role of institutional framework post 1991.
d) Growth and Distribution; Unemployment and Poverty; Human Development; Environmental concerns.
e) Demographic Constraints: Interaction between population change and economic development.

Unit V: Sectoral Trends and Issues
a) **Agriculture:**
Agrarian growth and performance in different phases of policy regimes i.e. pre green revolution and the two phases of green revolution; Factors influencing productivity and growth; the role of technology and institutions; price policy, the public distribution system and food security.
b) **Industry and Services:**
Phases of Industrialisation – the rate and pattern of industrial growth across alternative policy regimes; Public sector – its role, performance and reforms; The small scale sector; Role of Foreign capital.
c) **The Financial Sector:**
Structure, Performance and Reforms. Foreign Trade and balance of Payments: Structural Changes and Performance of India's Foreign Trade and Balance of Payments; Trade Policy Debate; Export policies and performance; Macro Economic Stabilisation and Structural Adjustment; India and the WTO, India at the United Nations: Security Council Reforms.

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Suggested Readings:

1. Mishra and Puri. *Indian Economics*. Himalaya Paublishing House
2. Dutt, Gaurav., Sundarum, KPM., and Mahajan, Ashwani. *Indian Economy*. S. Chand & Company.
3. Kapila, Uma . *Indian Economy since Independence.* Relevant articles.
4. Deepashree. *Indian Economy, Performance and Polices.* Scholar Tech. New Delhi
5. Bettleheim, Charles. *India Independent*. Chapters 1, 2 and 3.
6. Bhagwati, J., and Desai, P. *India: Planning for industrialization*. OUP, Ch 2.
7. Byres, T. J. The Indian Economy: Major Debates since Independence. OUP.
8. Ahluwalia, Montek *S. State-level Performance under Economic Reforms in India* in A. O. Krueger.
9. Dreze, Jean., and Sen, Amartya. *Economic Development and Social Opportunity*. Ch. 2. OUP.
10. Rangarajan, C., and Jadhav, N. *Issues in Financial Sector Reform*. Bimal Jalan. The Indian Economy. Oxford University Press, New Delhi.
11. Chakravarty, Sukhamoy. *Development Planning – The Indian Experience*. Oxford University Press, Delhi.
12. Todaro, M. A. *Economics Development in the Third World.* Addison – Wesley. Chs. 1 -3.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - IV
Paper BCH 4.4(b): ECONOMICS OF REGULATION OF DOMESTIC AND FOREIGN EXCHANGE MARKETS

Duration: 3 hrs.

Objective: To acquaint students with the economics regulations of domestic and foreign exchange markets.

Unit – I Regulation of Domestic Markets
Basic functions of government; Market efficiency; Market failure; the meaning & cause; public policy towards monopoly and competition.

Unit II: Foreign Trade Policy and Procedures
Main Features: Served from India Scheme; export promotion council; Vishesh Krishi and Gram Udyog Yojana; focus market scheme, duty exemption and remission scheme, advance authorization scheme and DFRC, DEPB, EPCG, etc; EOUs, EHTPs, STPs, BPTs, and SEZs.

Unit – II: Industries Development Regulation
An overview of current Industrial Policy; Regulatory Mechanism under Industries Development and Regulation Act., 1951. The Micro, Small and Medium Enterprises Development Act., 2006. Term of office of Chairperson and other Members, Duties, Powers and Functions of Commission.

Unit – III :Foreign Exchange Market
Balance of Payments; Market for Foreign Exchange; Determination of Exchange Rates.

Unit III: The Foreign Exchange Management Act, 1999
Definitions; Authorized Person, Capital Account Transaction Currency, Current Account Transaction, Foreign Exchange, Person, Person Resident in India, Repatriate to India. Regulation and Management of Foreign Exchange: Dealing in Foreign Exchange, Holding of Foreign Exchange, current Account Transactions, Capital Account Transactions, Export of Goods and Services, Realization and Repatriation of Foreign Exchange, Contravention and Penalties, Enforcement of the Orders of Adjudicating Authority, Adjudication and Appeal.

Suggested Readings:
1. Lipsey, R.G., & Chrystal, K.A. *Economics.* Oxford Univ. Press.
2. *Taxmann's Students Guide to Economics Laws.*Taxman Allied Services Pvt. Ltd, New Delhi.
3. *Taxman's Consumer Protection Law Manual with Practice Manual.* Taxmann Allied Services Pvt. Ltd., New Delhi.
4. Viswanathan, Suresh T. *Law & Practice of Competition Act. 2002.* Bharat Law House, New Delhi.
5. *Study Material Economic and Labour Laws (Paper 5)* – The Institute of Company Secretaries of India.

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - IV
Paper BCH 4.5(a): ENTREPRENEURSHIP

Duration: 2 hrs.

Objective: To understanding about entrepreneurship and creative thinking and behaviour for effectiveness at work and in life.

Unit I: Introduction
Meaning, elements, determinants and importance of entrepreneurship and creative behaviour. Entrepreneurship and creative response to the society' problems and at work. Dimensions of entrepreneurship: intrapreneurship, technopreneurship, cultural entrepreneurship, international entrepreneurship, netpreneurship, ecopreneurship, and social entrepreneurship.

Unit II: Types of Business Entities
Entrepreneurship and Micro, Small and Medium Enterprises. Concept of business groups and role of business houses and family business in India. . The contemporary role models in Indian business: their values, business philosophy and behavioural orientations. Conflict in family business and its resolution.

Unit III: Entrepreneurial Sustainability
Public and private system of stimulation, support and sustainability of entrepreneurship. Requirement, availability and access to finance, marketing assistance, technology, and industrial accommodation, Role of industries/entrepreneur's associations and self-help groups. The concept, role and functions of business incubators, angel investors, venture capital and private equity fund.

Unit IV: Business Plan Preparation
Sources of business ideas and tests of feasibility. Significance of writing the business plan/ project proposal. Contents of business plan/ project proposal. Designing business processes, location, layout, operation, planning & control; preparation of project report (various aspects of the project report such as size of investment, nature of product, market potential may be covered). Project submission/ presentation and appraisal thereof by external agencies, such as financial/non-financial institutions.

Unit V: Mobilising Resources
Mobilising resources for start-up. Accommodation and utilities. Preliminary contracts with the vendors, suppliers, bankers, principal customers; Contract management: Basic start-up problems

Suggested Readings:

1. Bhide, Amar V. *The Origin and Evolution of New Businesses*. Oxford University Press, New York
2. Kuratko and Rao. *Entrepreneurship: A South Asian Perspective*. Cengage Learning.
3. Desai, Vasant. *Dynamics of Entrepreneurial Development and Management*. Mumbai, Himalaya Publishing House.
4. Dollinger, Mare J. *Entrepreneurship: Strategies and Resources*. Illinois, Irwin.
5. Holt, David H. *Entrepreneurship: New Venture Creation*. Prentice-Hall of India, New Delhi.

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6. Kao, John J. *The Entrepreneurial Organization*. Englewoods Cliffs, New Jersey: Prentice-Hall.
7. Panda, Shiba Charan. *Entrepreneurship Development*. New Delhi, Anmol Publications.
8. Plsek, Paul E. *Creativity, Innovation and Quality*. (Eastern Economic Edition), New Delhi: Prentice-Hall of India.
9. Singh, Nagendra P. *Emerging Trends in Entrepreneurship Development*. New Delhi: ASEED.
10. Taneja, Satish., and Gupta, S.L. *Entrepreneurship Development-New Venture Creation*. Galgotia Publishing House, New Delhi.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - IV
Paper BCH 4.5(b): COLLECTIVE BARGAINING AND NEGOTIATION SKILLS

Duration: 2 hrs.

Objective: To promote understanding of the concept and theories of collective bargaining, and also to provide exposure to the required skills in negotiating a contract.

Unit I: Issues in Collective Bargaining
Meaning, Definitions and Characteristics of Collective Bargaining ; Critical Issues in Collective Bargaining; Theories of Collective Bargaining: Hick's Analysis of Wages Setting under Collective Bargaining, Conflict-choice Model of Negotiation, A Behavioural Theory of Labour Negotiation.

Unit II: Collective Bargaining in India
Pre-requisites for successful Collective Bargaining in any Country; Collective Bargaining in Practice; Levels of Bargaining, Coverage and Duration of Agreements; Difficulties in the Bargaining Process and Administration of Agreements.

Unit III: Negotiating a Contract
Meaning of Negotiations, Pre-negotiation- Preparing the Charter of Demand(s), Creating the Bargaining Team, Submission of COD, Costing of Labour Contracts

Unit IV: Negotiation Skills
Negotiation Process; Effective Negotiation-Preparing for Negotiation, Negotiating Integrative Agreements; Negotiation and Collective Bargaining- Approaches and Phases in Collective Bargaining, Coalition Bargaining and Fractional Bargaining, Impasse Resolution, Contract Ratification.
Post Negotiation-Administration of the Agreement, Grievance Management, Binding up the Wounds; Collective Bargaining & the emerging scenario.

Suggested readings:

1. Venkataratnam, C. S. *Industrial Relations: Text and Cases.* Oxford University Press, Delhi.
2. Salamon, Michael. *Industrial Relations—Theory & Practice*. London. Prentice Hall.
3. Dwivedi, R.S. *Managing Human Resources: Industrial Relations in Indian Enterprises.* Galgotia Publishing Company, New Delhi.
4. Edwards, P. *Industrial Relations: Theory and Practice in Britain*. Blackwell Publishing, U.K.

   Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - IV
Paper BCH 4.5(c): E-FILING OF RETURNS

Duration: 2 hrs.

Objective: To provide the students the conceptual and practical knowledge about electronic filing of returns.

Unit I: Conceptual Framework
Meaning of e-filing; difference between e-filing and regular filing of returns; benefits and limitations of e-filing, types of e-filing; e-filing process; relevant notifications.

Unit II: Income tax and E-filing of ITRs
Introduction to income tax – basic terminology, types of assessee, income taxable under different heads, basics of computation of total income and tax liability, deductions available from gross total income, PAN card, due date of filing of income tax return.
Instructions for filling out form ITR-1, ITR-2, ITR-3, ITR-4, ITR-4S, ITR-5, ITR-6.
Introduction to Income tax Portal; preparation of electronic return (practical workshops).

Unit III: TDS and E-filing of TDS returns
Introduction to the concept of TDS; provision regarding returns of TDS; types of forms for filling TDS returns; practical workshop on e-filing of TDS returns.

Unit IV: Service tax and E-filing of Service tax returns
Introduction to service tax; relevant notifications regarding e-filing of service tax returns; steps for preparing service tax returns; practical workshop on e-filing of service tax returns.

Suggested Readings:
1. Ahuja, Girish., and Gupta, Ravi. *Systematic Approach to Income Tax*. Bharat Law House, Delhi.

Softwares:
  1. Excel Utility available at *incometaxindiaefiling.gov.in*

Note: Latest edition of text book may be used.

B.Com. (Hons.): Semester - IV
Paper BCH 4.5(d): CYBER CRIMES AND LAWS

Duration: 2 hrs.

Objective: This paper intends to create an understanding towards the cyber crimes and to familiarize the students with the application of cyber laws in general.

Unit I: Cyber Crimes
Introduction- Computer crime and cyber crimes; Distinction between cyber crime and conventional crimes; cyber forensic; Kinds of cyber crimes- cyber stalking, cyber terrorism, forgery and fraud, crimes related to IPRs, computer vandalism; Privacy of online data; Cyber Jurisdiction; Copyright issues; and Domain name dispute etc.

Unit II: Definition and Terminology (Information Technology Act, 2000)
Concept of Internet, Internet Governance, E-Contract, E-Forms, Encryption, Data Security. Access, Addressee, Adjudicating Officer, Affixing Digital Signatures, Appropriate Government, Certifying Authority, Certification Practice Statement, Computer, Computer Network, Computer Resource, Computer System, Cyber Appellate Tribunal, Data, Digital Signature, Electronic Form, Electronic Record, Information, Intermediary, Key Pair, Originator, Public Key, Secure System, Verify, Subscriber as defined in the Information Technology Act, 2000.

Unit III: Electronic Records
Authentication of Electronic Records; Legal Recognition of Electronic Records; Legal Recognition of Digital Signatures; Use of Electronic Records and Digital Signatures in Government and its Agencies; Retention of Electronic Records; Attribution, Acknowledgement and Dispatch of Electronic Records; Secure Electronic Records and Digital Signatures.

Unit IV: Regulatory Framework
Regulation of Certifying Authorities; Appointment and Functions of Controller; License to issue Digital Signatures Certificate; Renewal of License; Controller's Powers; Procedure to be Followed by Certifying Authority; Issue, Suspension and Revocation of Digital Signatures Certificate, Duties of Subscribers; Penalties and Adjudication; Appellate Tribunal; Offences

Unit V: Case Laws
1. **Communication Device-Section 2(ha)** of the Information Technology (Amendment) Act, 2008-'State v Mohd. Afzal and others (2003), VIIAD (Delhi) 1, 107(2003) DLT385, 2003(71) DRJ178, 2003(3) JCC1669'
2. **Computer Network-Section 2 (j)** of the Information Technology (Amendment) Act, 2008 'Diebold System Pvt Ltd. v The Commissioner of Commercial Taxes, (2006), 144 STC, 59 (Kar)'
3. **Electronic Record Sec. 2 (t)**- 'Info Ede(India)Ltd and Ors Vs Sanjeev Goyal, 783, 2006,HC', 'Societe Des Products Nestle S.A & others Vs Essar Industries & Ors, 2006 (33) PTC 496(Del)'.

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4. **Time and Place of Dispatch and Receipt of Electronic Record-section 13-** 'Groff v America Online, Inc., 1998 WL 307001 (1998)'

5. **Penalty for Damage to Computer or Computer System- Section 43-**'Umashankar Sivasubramanian v ICICI Bank, 18.04.2010. (Petition No. 2462/2008)'

6. **Computer Related Offences:** ' Sanjay Kumar Vs State of Haryana, 2013, CRR No. 66 of 2013(O&M)1'

7. **Punishment for Disclosure of Information in Breach of Lawful Contract See 72 A-** ' Google India Pvt Ltd Vs M/S Vishaka Industries Limited and another, AP High Court.

8. **Punishment for Identity Theft-Section 66C-**'CBI v Arif Azim Case Judicial Reports (Criminal) 2003 (2) page 272'

9. **Punishment for Cheating by Personating by using Computer Resource-section 66D-** 'National Association of Software and Service Companies (NAASCOM)v Ajay Sood. (2005) F.S.R. 38; 119 (2005) DLT 596, 2005 (30) PTC 437 Del'

10. **Punishment for Publishing or Transmitting Obscene Material in Electronic formsection**

67-'Avnish Bajaj v State (N.C.T.) of Delhi, (2005) 3 Comp, LJ 364 (Del), 116(2005) DLT427, 2005(79) DRJ576'

11. **Punishment for Publishing or Transmitting of Material Containing Sexually Explicit Act, etc., in Electronic Form-Section 67A-**'R v Graham Waddon., Southwark [Crown Court, 30/6/1999]'

Suggested Reading:

1. Efraim, Turban., Jae, Lee., King, David., and Chung, HM. *Electronic Commerce-A managerial Perspective*. Pearson Education

2. Joseph, P.T. *E-Commerce-An Indian Perspective*. PHI

3. Chaffey, Dave. *E-business and E-commerce Management*. Pearson Education.

4. Painttal, D. *Law of Information Technology*. Taxmann Publications Pvt. Ltd., New Delhi.

5. Dietel, Harvey M., Dietel, Paul J., and Kate Steinbuhler. *E-business and E-commerce for managers*. Pearson Education.

6. Brian, Craig. *Cyber Law: The Law of the Internet and Information Technology*. Pearson Education

7. Sharma J. P., and Kanojia, Sunaina . *Cyber Laws*. Ane Books Pvt Ltd, New Delhi.

8. *Information Technology Rules 2000 &Cyber Regulations Appellate Tribunal Rules 2000 with Information Technology Act 2000*. Taxmann Publications Pvt. Ltd., New Delhi.

Note: Latest edition of text book may be used.

B.Com. (Hons.): Semester - V
Paper BCH 5.1: PRINCIPLES OF MARKETING

Duration: 3 hrs.

Objective: The objective of this course is to provide basic knowledge of concepts, principles, tools and techniques of marketing.

Unit I
1. **Introduction:** Nature, scope and importance of marketing; Evolution of marketing concepts; Marketing mix; Marketing environment. Micro and Macro environmental factors.
2. **Consumer Behaviour** – An Overview: Consumer buying process; Factors influencing consumer buying decisions.

Unit II
3. **Market Selection:** Market segmentation – concept, importance and bases; Target market selection; Positioning concept, importance and bases; Product differentiation vs. market segmentation.
4. **Product:** Meaning and importance. Product classifications; Concept of product mix; Branding, packaging and labeling; After-sales services; Product life-cycle; New product development.

Unit III
5. **Pricing:** Significance; Factors affecting price of a product; Major pricing methods; Pricing policies and strategies.
6. **Promotion:** Nature and importance of promotion; Promotion tools: advertising, personal selling, public relations; sales promotion and publicity – concept and their distinctive characteristics; Promotion mix; Factors affecting promotion mix decisions; Integrated Marketing Communication Approach.

Unit IV
7. **Distribution:** Channels of distribution - meaning and importance; Types of distribution channels; Wholesaling and retailing; Factors affecting choice of distribution channel; Distribution logistics: Meaning, importance and decisions.
8. **Retailing:** Types of retailing – store based and non-store based retailing, chain stores, specialty stores, supermarkets, retail vending machines, mail order houses, retail cooperatives; Management of retailing operations: an overview; Retailing in India: changing scenario.

Unit V
9. **Developments & Issues in marketing:** Rural marketing, Social marketing, Online marketing, Direct marketing, Services marketing, Green marketing, Relationship marketing. Marketing ethics.

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Suggested Readings:

1. Kotler, Philip., Keller, Kevin Lane., Koshy, Abraham., and Jha, Mithileshwar. *Marketing Management: A South Asian Perspective.* Pearson Education.
2. Palmer, Adrian. *Introduction to Marketing.* Oxford University Press, UK
3. Lamb, Charles W., Hair, Joseph F., and McDaniel, Carl. *Principles of Marketing,* South Western Publishing, Ohio
4. Chhabra, T.N. *Principles of Marketing.* Sun India Publication.
5. Kumar, Arun., & N. Meenakshi. *Marketing Management.* Vikas Publications.
6. McCarthy, E. Jerome., and William, D. Perreault. *Basic Marketing.* Richard D. Irwin.
7. Pride, William M., and Ferell, D.C. *Marketing: Planning, Implementation & Control.* Cengage Learning.
8. Majaro, Simon. *The Essence of Marketing.* Prentice Hall, New Delhi.
9. Zikmund, William G., and Michael, D'Amico. *Marketing: Creating and Keeping Customers in an E-Commerce World.* Thomson Learning.
10. Etzel, Michael J., Walker, Bruce J., Staton, William J., and Pandit, Ajay. *Marketing Concepts and Cases.* Tata McGraw Hill (Special Indian Edition).
11. McCarthy, E. Jerome., Cannon, Joseph P., and William, D. Perrault, Jr. *Basic Marketing: A Managerial Approach.* McGraw Hills.

Note: Latest edition of text books may be used

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<center>B.Com. (Hons.): Semester - V</center>
<center>**Paper BCH 5.2: FUNDAMENTALS OF FINANCIAL MANAGEMENT**</center>

Duration: 3 hrs.

Objective: To familiarize the students with the principles and practices of financial management.

Unit I: Introduction
Nature, scope and objectives of financial management, Agency problem, Time value of money, Risk and return- Concept and Calculation (including Capital Asset Pricing Model).

Unit II: Capital Budgeting   **Lectures/Practical Lab**
The Capital Budgeting Process, Cash Flow Estimation, Payback Period Method, Discounted Payback Period Method, Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR), Profitability Index, Capital budgeting under Risk-Certainty Equivalent Approach and Risk-Adjusted Discount Rate.

Unit –III: Cost of Capital and Financing Decision   **Lectures/Practical Lab**
Sources of long-term financing, Estimation of components of cost of capital, Methods for calculating Cost of Equity, Cost of Retained Earnings, Cost of Debt and Cost of Preference Capital, Weighted Average Cost of Capital (WACC) and Marginal Cost of Capital. Capital Structure- Theories of Capital Structure (Net Income, Net Operating Income, MM Hypothesis, Traditional Approach). Operating and Financial leverage. Determinants of capital structure.

Unit IV: Dividend Decision
Theories for Relevance and irrelevance of dividend decision for corporate valuation- Walter's Model, Gordon's Model, MM Theory, Cash and stock dividends. Dividend policies in practice and Determinants of Dividend.

Unit –V: Working Capital Decisions
Concepts of Working Capital, Operating & Cash Cycles, Risk-return trade off, sources of short term finance, working capital estimation, cash management, receivables management, inventory management.
Note:
1.   In addition the students will work on Spreadsheet for doing basic calculations in finance (Unit 2 and 3 above) and hence can be used for giving students subject related assignments for their internal assessment.
2.   There shall be 4 Credit Hrs. for Lectures + one Credit hr. (Two Practical Periods per week per batch) for Practical Lab + one credit Hr for Tutorials (per group)

Suggested Readings:

1. Khan, M.Y. and Jain, P.K. *Financial Management: Text and Problems.* Tata McGraw Hill

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2. Horne, Van., James, C., and John, Wachowicz. *Fundamentals of Financial Management.* Pearson Education

3. Ross, Stephen A., Westerfield, Randolph., and Jeffrey, Jaffe. *Corporate Finance.* Tata McGraw Hill

4. Srivastava, Rajiv., and Mishra, Anil. *Financial Management.* Oxford University Press, UK

5. Singh, Preeti. *Financial Management.* Ane Books Pvt. Ltd, New Delhi

6. Singh, J.K. *Financial Management-text and problems.* Dhanpat Rai and Company, Delhi

7. Sharma, G.L., and Singh, Y.P. *Contemporary issues in Finance and Taxation.* Academic Foundation, Delhi

8. Rustagi, R.P. *Financial Management.* Galgotia Publishing Company

9. Pandey, I M. *Financial Management.* Vikas Publications UNCTAD Reports.

10. Chandra, P. *Financial Management-Theory and Practic.,* Tata McGraw Hill

11. Bhalla, V. K. *Financial Management & Polic.* Anmol Publications, Delhi

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (a): MANAGEMENT ACCOUNTING

Duration: 3 hours

Objective: To impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.

Unit I: Introduction
Meaning, Objectives, Nature and Scope of management accounting, Difference between cost accounting and management accounting, Cost control and Cost reduction, Cost management

Unit II: Budgetary Control
Concept of budget, budgeting and budgetary control, objectives, merits, and limitations. Budget administration. Functional budgets. Fixed and flexible budgets. Zero base budgeting. Programme and performance budgeting.

Unit III: Standard Costing
Meaning of standard cost and standard costing, advantages, limitations and applications. Variance Analysis – material, labour, overheads and sales variances. Disposition of Variances, Control Ratios.

Unit IV: Marginal Costing
Absorption versus Variable Costing, Distinctive features and income determination. Cost-Volume-Profit Analysis, Profit / Volume ratio. Break-even analysis-algebraic and graphic methods. Angle of incidence, margin of safety, Key factor, determination of cost indifference point.

Unit V: Decision Making
Steps in Decision Making Process, Concept of Relevant Costs and Benefits, Various short term decision making situations – profitable product mix, Acceptance or Rejection of special/ export offers, Make or buy, Addition or Elimination of a product line, sell or process further, operate or shut down. Pricing Decisions: Major factors influencing pricing decisions, various methods of pricing

Unit VI: Contemporary Issues
Responsibility Accounting: Concept, Significance, Different Responsibility Centres, Divisional Performance Measurement: Financial and Non-Financial measures. Transfer Pricing

Suggested Readings:

1.   Lal, Jawahar., and Srivastava, Seema. *Cost Accounting*. McGraw Hill Publishing Co., New Delhi.
2.   Arora, M.N. *Management Accounting*. Himalaya Publishing House.
3.   Jhamb, H.V. *Management Accounting*. Ane Books Pvt. Ltd. New Delhi

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4. Nigam, B.M. Lall., and Jain, I.C. *Cost Accounting-Principles and Practice*. Prentice Hall of India, New Delhi.

5. Khan, M.Y. and Jain, P.K. *Management Accounting*. Tata McGraw Hill Publishing Co., New Delhi.

6. Usry, Milton E., and Lawrence, H. Hammer. *Cost Accounting, Planning and Control*. South Western Publishing Co.

7. Drury, Colin. *Management and Cost Accounting*. Thomson Learning.

Note: Latest edition of text book may be used.

B.Com. (Hons.): Semester - V
Paper: BCH- 5.4 DSE Group A (b): CORPORATE TAX PLANNING

Duration: 3 hrs.

Objective: To provide basic knowledge of corporate tax planning and its impact on decision-making.

Unit	Contents
Unit I	Tax planning, tax management, tax evasion, tax avoidance. Types of companies Residential status of companies and tax incidence, clubbing Tax liability and minimum alternate tax, Carry forward and set off of losses in case of certain companies, deductions available to corporate assesses. Tax on distributed profits, Units of Mutual funds.
Unit II	Tax planning with reference to setting up of a new business: Location of Business, nature of business, form of organisation. Tax planning with reference to financial management decision - Capital structure, dividend and bonus shares Tax planning with reference to sale of scientific research assets
Unit III	Tax planning with reference to specific management decisions - Make or buy; own or lease; repair or replace Tax planning with reference to employees' remuneration Tax planning with reference to receipt of insurance Compensation Tax planning with reference to distribution of assets at the time of liquidation
Unit IV	Tax planning in respect of non-residents, Taxable income for non-residents, interest, salaries and exemptions from tax to non-residents. Double taxation relief Provisions regulating transfer pricing, computation of Arm's length pricing Advance rulings Advance pricing agreement
Unit V	Tax planning with reference to business restructuring - Amalgamation - Demerger - Slump sale - Conversion of sole proprietary concern/partnership firm into Company - Conversion of company into LLP - Transfer of assets between holding and subsidiary companies

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Suggested Readings:

1. Singhania, Vinod K. and Singhania, Monica. *Corporate Tax Planning*. Taxmann Publications Pvt. Ltd., New Delhi.
2. Ahuja, Girish. and Gupta, Ravi. *Corporate Tax Planning and Management*. Bharat Law House, Delhi
3. Acharya, Shuklendra and Gurha, M.G. *Tax Planning under Direct Taxes*. Modern Law Publication, Allahabad.
4. Mittal, D.P. *Law of Transfer Pricing*. Taxmann Publications Pvt. Ltd., New Delhi.
5. IAS – 12 and AS – 22.
6. Ghosh, T.P. *IFRSs.* Taxmann Publications Pvt. Ltd. New Delhi.

Journals

1. Income Tax Reports, Company Law Institute of India Pvt. Ltd., Chennai.
2. Taxman, Taxman Allied Services Pvt. Ltd., New Delhi.
3. Current Tax Reporter, Current Tax Reporter, Jodhpur

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (c): ADVERTISING

Duration: 3 hrs.

Objective: The objective of this course is to familiarize the students with the basic concepts, tools and techniques of advertising used in marketing.

Unit I: Introduction
Communication process-basic and elements; Marketing Communication-response hierarchy, models and alternatives; Advertising-meaning, nature and importance of advertising, types and objectives. Audience selection; Setting of advertising budget: determinants and major methods.

Unit II: Media Decisions
Major media types - their merits and demerits; Advertising through internet and interactive media-Issues and considerations; Factors influencing media choice; media selection, media scheduling

Unit III: Message Development
Advertising creativity; Advertising appeals; Advertising copy and elements of print advertisement creativity; Tactics for print advertisement.

Unit IV: Measuring Advertising Effectiveness
Arguments for and against measuring effectiveness; Advertising testing process; Evaluating communication and sales effects; Pre- and Post-testing techniques.

Unit V: Organisational Arrangements
a) Advertising Agency: Role, types and selection of advertising agency; Reasons for evaluating advertising agencies.
b) Social, ethical and legal aspects of advertising in India; Recent developments and issues in advertising.

Suggested Readings:
1. Belch and Belch. *Advertising and Promotion*. Tata McGraw Hill Co.
2. Sharma, Kavita. *Advertising: Planning and Decision Making*. Taxmann Publication Pvt. Ltd.
3. Mahajan, J.P., and Ramki. *Advertising and Brand Management*. Ane Books Pvt Ltd, New Delhi.
4. Burnett, Wells., and Moriatty. *Advertising: Principles and Practice*. Pearson Education
5. Shimp, Terence A. *Advertising and Promotion: An IMC Approach*. South Western Cengage Learning.
6. O'Guinn. *Advertising and Promotion: An Integrated Brand Approach.*, Cengage Learning.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (d): BANKING AND INSURANCE

Duration: 3 hrs.

Objective: To impart knowledge about the basic principles of the banking and insurance.

Unit I

Origin of banking: definition, banker and customer relationship, General and special types of customers, Types of deposits, Origin and growth of commercial banks in India. India's approach to banking Sector reforms, International security standards in banking, Global financial crisis and India's banking Sector, Achievements of financial sector reforms and areas of concern.

Unit II

Commercial Banks: Credit Allocation Policies, Credit Market Reforms, Flow of Credit to Agriculture and Allied Activities, Credit Flow to Micro, Small, and Medium Enterprises, Technological Channels for the Delivery of Financial Services, Customer Services in banking, Role of Foreign Banks, Advantages and Disadvantages of Foreign Banks, Road Map for Foreign Banks in India.

Unit III

Operations of Banking: cheques crossing and endorsement, types and rules of crossing. Principles of sound lending, secured vs. unsecured advances, Types of advances, Advance against various securities. Securitisation of Standard Assets, Anti-money Laundering Guidelines, Credit Information Bureau of India Ltd. (CIBIL); Balance Sheet of a Bank; special items, off balance sheet items. Basel I, Basel II, Migration to Basel II Norms.

Unit IV

Era of Internet Banking and its benefits, Home banking, Mobile banking, Virtual banking, ECS (Electronic Clearing System), E-payments, Plastic money, EFT (Electronic Fund Transfer), E-money: electronic purse; digital cash. Safeguards for internet banking, Critical comparison of traditional banking methods and e banking.

Unit V

Basic concepts of risk, Types of business risk, Assessment and transfer, Basic principles of utmost good faith, Insurable interest, Indemnity, Economic function, Proximate cause, Subrogation and contribution.

Unit VI

Legal Aspects of insurance contract, Types of insurance: Life and Non-life, Re-insurance, Risk and return relationship, Regulatory Framework of Insurance: Role, power and functions of IRDA, IRDA Act 1999. Bancassurance.

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Suggested Readings:

1. Bhasin, Niti. *Indian Financial System : Evolution and Present Structure*. New Century Publications
2. Agarwal, O.P. *Banking and Insurance*. Himalya Publishing House
3. Suneja, H.R. *Practical and Law of Banking*. Himalya Publishing House
4. Saxena, G.S. *Legal Aspects of Banking Operations*. Sultan Chand and Sons
5. Gupta, P.K. *Insurance and Risk Management*. Himalaya Publishing House
6. Mishra, M.N. *Principles and Practices of Insurance*. S. Chand and Sons.
7. Black, K.., and Skipper, H.D. *Life and Health Insurance*. Pearson Education
8. Vaughan, E.J., and Vaughan, T. *Fundamentals of Risk and Insurance*. Wiley & Sons

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (e): COMPUTERISED ACCOUNTING SYSTEM

Duration: 3 hrs.

Objective: To enhance the skills needed for computerized accounting system and to enable the students to develop simple accounting applications.

Unit I: Computerized Accounting: Using Generic Software   **Lectures/Practical Lab**
Taxation: TDS, VAT and Service Tax
Auditing in Computerized Accounting system: Statutory Audit, Voucher verification,
Verification of related party transaction, CAAT: Various Tools

Unit II: Designing Computerised Accounting System   **Lectures/Practical Lab**
Designing Computerised Accounting System using a DBMS Package
Creating a voucher entry Form,
Preparing ledgers with SQL, Form, and Report
Preparing Trial Balance with SQL and Report

Unit III: Designing Accounting Support System   **Lectures/Practical Lab**
Designing Supplier and customers System for Accounting using Form, Query, Module, and Report; Designing Payroll System for Accounting using Form, Query, Module, and Report

Note:
1. There shall be a practical examination of 100 Marks (Practical-80 Marks, Viva-10 Marks and Work Book- 10 Marks) and duration of Examination shall be 3 Hrs.
2. There shall be Four Lectures per class and 4 Practical periods per batch to be taught in computer Lab.

Suggested Readings:
1. Boockholdt,J.L. *Accounting Information System: Transaction Processing and Control*. Irwin Mcraw-Hill.
2. Hall, J.A. *Accounting Information System*. South-Western College Publishing.
3. Gelinas, Ulric J., and Sutton, Steve G. *Accounting Information System*. South Western Thomson Learning.
4. Rajaraman, V. *Introduction to Information Technology*. PHI.
5. Bharihoka, Deepak. *Fundamentals of Information Technology*. Excel Book.
6. Madan, Sushila. *Computer Applications*. Mayur Paperbacks, New Delhi.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (f): FINANCIAL MARKETS, INSTITUTIONS AND FINANCIAL SERVICES

Duration: 3 hrs.

Objective: To provide the student a basic knowledge of financial markets and institutions and to familiarize them with major financial services in India.

Unit I: An Introduction to Financial System and its Components
-financial markets and institutions. Financial intermediation. Flow of funds matrix. Financial system and economic development. An overview of Indian financial system.

Unit II: Financial Markets
Money market-functions, organization and instruments. Role of central bank in money market; Indian money market-An overview.
Capital Markets-functions, organization and instruments. Indian debt market; Indian equity market-primary and secondary markets; Role of stock exchanges in India.

Unit III: Financial Institutions
Depository and non-depository institutions, Commercial banking-introduction, its role in project finance and working capital finance. Development Financial Institutions (DFIs)-An overview and role in Indian economy. Life and non-life insurance companies in India; Mutual Funds- Introduction and their role in capital market development. Non-banking financial companies (NBFCs).

Unit IV: Overview of Financial Services Industry
Fund based and fee based financial services, Merchant banking-pre and post issue management, underwriting. Regulatory framework relating to merchant banking in India.

Unit V: Leasing and hire-purchase
Consumer and housing finance; Venture capital finance; Factoring services, bank guarantees and letter of credit; Credit rating; Financial Counseling and Portfolio management Services.

Suggested Readings:
1. Bhole, L.M. *Financial Markets and Institutions*. Tata McGraw Hill Publishing Company
2. Khan, M.Y. *Indian Financial System-Theory and Practice*. New Delhi: Vikas Publishing House
3. Sharma, G.L., and Singh, Y.P. *Contemporary Issues in Finance and Taxation*. Academic Foundation, Delhi
4. Khan and Jain. *Financial Services*. Tata McGraw Hill
5. Singh, J.K. *Venture Capital Financing in India*. Dhanpat Rai and Company, New Delhi.
6. Annual Reports of Major Financial Institutions in India.

Note: Latest edition of the text book may be used

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B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (g): INDUSTRIAL LAWS

Duration: 3 hrs.   **Marks: 100**   **Lectures: 65**

Objective: To familiarize the students with the understanding and provisions of industrial related laws. Case studies and problems involving issues in industrial laws are required to be discussed.

Unit I: The Employees Provident Fund & Miscellaneous Provisions Act, 1952

Definitions; Schemes under the Act – Employees' Provident Fund Scheme; Employees' Pension Scheme, 1995; Employees' Deposit linked Insurance Scheme.

Unit II: Employees State Insurance Act, 1948

Objects and Applicability of the Scheme; Definitions: Personal Injury, Factory, Manufacturing Process, Wages, Partial and Permanent Disablement; ESI Corporation, Standing Committee and Medical Benefit Council; Contributions; Adjudication of Dispute and Claims, Benefits.

Unit III: Payment of Wages Act, 1936

Definitions – Employed Person, Employer, Factory, Industrial or other Establishment, Wages; Responsibility for Payment of Wages; Fixation of Wage Period; Time of Payment of Wages; Mode of Payment; Deductions from Wages and Fines.

Unit IV: The Payment of Bonus Act, 1965

Definitions – Accounting year, allocable surplus, available surplus, employee, employer, establishments, salary or wage; determination of bonus, calculation of bonus, eligibility for bonus, disqualifications for bonus, payment of minimum and maximum bonus, set on and set off of allocable surplus, deductions of certain amounts from bonus payable, time limit for payment of bonus.

Unit V: Payment of Gratuity Act, 1972

Applicability and non- applicability of the Act; Definitions-employee, employer, continuous service; payment of gratuity; forfeiture of gratuity; employer's duty to determine and pay gratuity; recovery of gratuity; penalties.

Unit VI: Employee's Compensation Act, 1923

Definitions: dependent, employer, partial and total disablement, workmen, injury, accident; employer's liability for compensation; amount of compensation; contracting; commissioner; case laws.

Suggested Readings:

1. Malik, K.L. *Industrial Laws and Labour Laws*. Eastern Book Company, Lucknow.
2. Sharma, J.P. *Simplified Approach to Labour Laws*. Bharat Law House (P) Ltd., New Delhi.

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3. Kumar, H.L. *Digest of Labour Cases*. Universal Law Publishing Co P Ltd, New Delhi
4. Srivastava, S.C. *Industrial Relations & Labour Laws.* Vikas Publishing House (P) Ltd.

Note: Latest edition of text book may be used.

B.Com. (Hons.): Semester - V
Paper: BCH-5.4 DSE Group A (h): ORGANISATIONAL BEHAVIOUR

Duration: 3 hrs.

Objective: To develop a theoretical understanding among students about the structure and behaviour of organization as it develops over time. The course will also make them capable of realizing the competitiveness for firms.

Unit I: Introduction
Organisational Theories: Classical, Neo-classical and Contemporary. Organisational Behaviour: concepts, determinants, challenges and Formal and Informal structures; Flat and Tall structures. Opportunities of OB. Contributing disciplines of OB. Organizational Behaviour Models.

Unit II: Individual Behaviour
Personality- Type A and B, Big Five personality types, Factors influencing personality.
Values and Attitudes- Concept and types of values: Terminal value and Instrumental Value. Component of attitude, job related attitudes, measurement of attitude.
Learning- Concept and Learning theories and reinforcement, Schedules of reinforcement.
Perception and Emotions- Concept, Perceptual process, Importance, Factors influencing perception, perceptual errors and distortions, Emotional Intelligence.

Unit III: Group Decision making and Communication
Concept and nature of decision making process, Individual versus group decision making. Nominal group technique and Delphi technique. Communication and Feedback, Models of Communication. Transactional Analysis, Johari Window.

Unit IV: Motivation
Meaning and Importance of motivation, Theories- Vroom's Valence - Expectancy Theory, Intrinsic motivation by Ken Thomas .Behaviour modification, Motivation and organisational effectiveness, Measurement of motivation using standard questionnaire.

Unit V: Leadership, Power and Conflict
Concept and theories, Styles of leadership, Behavioural approach, Situational approach, Leadership effectiveness. Power and conflict. Bases of power, power tactics; Sources of conflict, Conflict Resolution Strategies.

Unit VI: Dynamics of Organisational Behaviour
Organisational Culture and climate- Concept and determinants of organisational culture. Developing Organizational culture. Organisational change- Importance, Stability vs. Change, Proactive vs Reaction Change, Change Process, Managing Change. Individual and organisational factors to stress; Work Stressors, Consequences of stress on individual and organization; Prevention and Management of stress.

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Suggested Readings:

1. Robbins, S.P. *Organisational Behaviour*. Prentice Hall of India Pvt. Ltd., New Delhi.
2. Luthans, Fred. *Organisational Behaviour*. McGraw Hill International, New York.
3. Greenberg, Jerald., and Baron, Robert. A. *Organisational Behaviour,* Prentice Hall of India Pvt. Ltd., New Delhi.
4. Chhabra, T.N. *Organisational Behaviour*. Sun India Publications.
5. Sekaran, Uma. *Organisational Behaviour: Text and Cases*. Tata McGraw Hill, New Delhi.
6. Hersey, P.K., Blanchard, H., and Johnson, D.E. *Management of organisational Behaviour; Leading Human Resources*, Pearson Education.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - VI
Paper BCH 6.1- AUDITING AND CORPORATE GOVERNANCE

Duration: 3 hrs.

Objective: To provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards.

Unit I: Auditing
Basic Principles and Techniques; Classification of Audit, Audit Planning, Internal Control – Internal Check and Internal Audit; Audit Procedure – Vouching and verification of Assets & Liabilities;
Company Auditor- Qualifications and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights and Duties; Auditor's Report- Contents and Types, Liabilities of Statutory Auditors under the Companies Act 2013
Special Areas of Audit: Cost audit, Tax audit and Management audit; Recent Trends in Auditing: Basic considerations of audit in EDP Environment; Relevant Auditing and Assurance Standards (AASs).

Unit II: Corporate Governance
Meaning, Theories, Models and Benefits of Corporate Governance; Politics and Governance; Board Committees and their Functions; Insider Trading; Rating Agencies; Green Governance/ E-governance; Clause 49 of Listing Agreement; Corporate Governance in Public Sector Undertakings; Corporate Funding of Political Parties; Class Action; Whistle Blowing; Shareholders Activism.

Unit III: Major Corporate Governance Failures
BCCI (UK), Maxwell Communication (UK), Enron (USA), World.Com (USA), Andersen Worldwide (USA), Vivendi (France), Harshad Mehta Scam, Satyam Computer Services Ltd, and Kingfisher Airlines; Common Governance Problems Noticed in various Corporate Failures; Codes and Standards on Corporate Governance; Initiatives in India.

Unit IV: Business Ethics
Morality and Ethics; Business Values and Ethics; Various Approaches to Business Ethics; Ethical Theories; Ethical Governance; Corporate Ethics; CSR – Extension Of Business Ethics; Benefits of Adopting Ethics in Business; Ethics Programme; Code of Ethics; Ethics Committee

Unit V: Corporate Social Responsibility (CSR)
Corporate Philanthropy, Meaning of CSR, CSR and CR, CSR and Corporate Sustainability, CSR and Business Ethics, CSR and Corporate Governance, Environmental Aspect of CSR, CSR provision under the Companies Act 2013, CSR Committees, CSR Models, Drivers of CSR, Codes and Standards on CSR, Global Reporting Initiatives, ISO 26000

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Suggested Readings:

1. Institute of Chartered Accountants of India, *Auditing and Assurance Standards*, ICAI, New Delhi.
2. Relevant Publications of ICAI on *Auditing* (CARO).
3. Gupta, Kamal., and Arora, Ashok. *Fundamentals of Auditing.* Tata Mc-Graw Hill Publishing Co. Ltd., New Delhi.
4. Ghatalia, S.V. *Practical Auditing.* Allied Publishers Private Ltd., New Delhi.
5. Singh, A. K., and Gupta, Lovleen. *Auditing Theory and Practice.* Galgotia Publishing Company.
6. Mallin, Christine A. *Corporate Governance (Indian Edition).* Oxford University Press, New Delhi.
7. Rani, Geeta D., and Mishra, R.K. *Corporate Governance- Theory and Practice*, Excel Books, New Delhi.
8. Tricker, Bob. *Corporate Governance-Principles, Policies, and Practice* (Indian Edition). Oxford University Press, New Delhi.
9. Sharma, J.P. *Corporate Governance, Business Ethics, and CSR.* Ane Books Pvt Ltd, New Delhi.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - VI
Paper BCH 6.2: INDIRECT TAX LAWS

Duration: 3 hrs.

Objective: To provide basic knowledge and equip students with application of principles and provisions of Service Tax, VAT, Central Excise, and Customs Laws.

Unit I: Service tax
Concepts and general principles; Sources of service tax law; Charge of service tax and taxable services (Meaning of services, Negative List, Mega Exemption Notification); Place of Provision of Services; Point of Taxation; Valuation of taxable services; Exemptions & abatements; Payment of service tax (including Reverse Charge Mechanism); Service tax procedures; Accounting codes of service tax returns; Filing of returns; Demand, Adjudication and offences; Liability & Refunds; Penalties; Interest; CENVAT Credit; E-filing of service tax return.

Unit II: VAT
Concepts and general principles; Calculation of VAT Liability including input Tax Credits; Small Dealers and Composition Scheme; VAT Procedures; Treatment of stock & Branch transfer under State VAT Acts; Filing & Return under State VAT Act; E-filing; Practical problems on VAT.

Unit III: Central Excise
Levy & Collection of excise duty; Goods & Excisable goods; Manufacture and Manufacturer; Dutiability of intermediate products &captive consumption; Packing, labelling & branding activities; Determination of taxable event for change of duty; Valuation; CENVAT; General procedures; Export procedures; Bonds & types of bonds; Refund & appeals; Remission of duty &destruction of goods; SSI, Job Work.

Unit IV: Customs laws
Basic concepts of customs law- Territorial waters, high seas; Types of custom duties – Basic, Countervailing & Anti- Dumping Duty, Protective duty, Safeguard Duty; Classification of goods; Warehousing- special provisions of warehousing; Valuation, Customs Procedures, Import and Export Procedures, Baggage, Exemptions from custom duty.

Suggested Readings:
1. Singhania, Vinod K., and Singhania, Monica. *Students' Guide to Indirect Taxes.* Taxmann Publications Pvt. Ltd., Delhi.
2. Datey, V.S. *Indirect Tax Law and practice.* Taxmann Publications Pvt. Ltd., Delhi,
3. Kumar, Sanjeev. *Systematic Approach to Indirect Ta*xes.
4. Gupta, S. S. *Service Tax* -How to *meet your obligation.* Taxmann Publications Pvt. Ltd., Delhi.
5. Ahuja, Grish., & Gupta, Ravi. *Indirect Taxes*, Flair Publication Pvt. Ltd.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (a): FUNDAMENTALS OF INVESTMENT

Duration: 3 hrs.

Objective: To familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.

Unit-I: The Investment Environment
The investment decision process, Types of Investments-Commodities, Real Estate and Financial Assets, The Indian securities market, the market participants and trading of securities, security market indices, sources of financial information. Return and risk: Concept, Calculation, Trade off between return and risk, Impact of taxes and inflation on return.

Unit-II: Fixed Income Securities
Bond Fundamentals, Estimating bond yields, Bond Valuation, Types of bond risks, default risk and credit rating.

Unit-III: Approaches to Equity Analysis
Fundamental Analysis, Technical Analysis and Efficient Market Hypothesis. Valuation of Equity Shares using various models.

Unit-IV: Portfolio Analysis and Financial Derivatives
(a) Portfolio and Diversification, Portfolio Risk and Return (b) Mutual Funds (c) Introduction to Financial Derivatives-Forwards, Futures & Options, Financial Derivatives Markets in India.

Unit-V: Investor Protection
Role of SEBI and stock exchanges in investor protection; Investor grievances and their redressal system, insider trading, investors' awareness and activism.

Spreadsheet is the recommended software for doing basic calculations in finance and hence can be used for giving students subjects related assignments for their internal assessment purposes.

Suggested Readings
1. Jones, C.P. *Investments Analysis and Management*. Wiley.
2. Chandra, Prasanna. *Investment Analysis and Portfolio Management*. Tata McGraw Hill.
3. Rustogi, R.P. *Fundamentals of Investment*. Sultan Chand & Sons, New Delhi.
4. Vohra, N.D., and Bagri, B.R. *Futures and Options*. McGraw Hill Publishing.
5. Mayo. *An Introduction to Investment*. Cengage Learning.

Note: The Latest edition of text books may be used.

B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (b): CONSUMER AFFAIRS AND CUSTOMER CARE

Duration: 3 hrs.

Objective: This paper seeks to familiarise the students with their rights as a consumer and provide understanding of social framework of consumer rights and legal framework of protecting consumer rights.

Unit I: Conceptual Framework
Consumer and Markets: Concept of consumers; Nature of markets; Concept of price in retail and wholesale; Maximum Retail Price (MRP) and Local Taxes; Fair price; misleading advertisements and deceptive packaging.

Experiencing Dissatisfaction: complaining behaviour; Form of complaint to a business. Making a complaint heard by the Business; Corporate redress systems; Conciliation and intermediation for out-of-court Redressal.

Quality and Standardization: Role of national standards; National Standards- Indian Standards Mark (ISI), Agmark; Voluntary and mandatory standards; Licensing and surveillance. Consumer grievance redressal under the BIS Act, 1986; Introduction to International Standards ISO 10000 Suite: International standards on handling of consumer complaints by organizations;

Unit II: The Consumers Protection Act, 1986
Objectives and Basic Concepts: Consumer, goods, service, defect in goods, deficiency in service, spurious goods and services, unfair trade practice, restrictive trade practice. Organizational set-up under the Consumer Protection Act; advisory bodies: Consumer Protection Councils at the Central, State and District Levels, Basic consumer rights.
Adjudicatory Bodies: Their composition, powers and jurisdiction (pecuniary and Territorial): District Forum; State Commission; National Commission.
Role of Supreme Court under the CPA.

Unit III: Grievance Redress Mechanism under the CPA, 1986
Who can file a complaint? Grounds of filing a complaint; Limitation period; Procedure for filing and hearing of a complaint; Temporary injunction. Reliefs which can be provided; Appeal; Enforcement of order; Bar on frivolous and vexatious complaints; Offences and penalties.
Leading Cases decided under Consumer Protection Act related to:
i. Medical Negligence
ii. Banking and Financial Service
iii. Housing & Real Estate
iv. Electricity, Water, and Telecom Services.
v. Education
vi. Defective Product
vii. Unfair Trade Practice

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Unit IV: Consumer Protection in India
a. Consumer Movement in India: Formation of consumer organization and their role in consumer protection including advocacy and campaigning for policy intervention; Evolution of consumer movement in India. Recent developments in consumer protection in India; National consumer Helpline, Citizens Charter, Product testing

b. Industry Regulators and Consumer Complaint Redressal Mechanism
i. Banking: RBI and Banking Ombudsman
ii. Telecommunication: TRAI
iii. Insurance: IRDA
iv. Food items: Food Safety and Standards Authority of India (an overview)
v. Electricity Supply: Electricity Regulatory Commission
vi. Civil Aviation: DGCA

Unit V: Competition Law
Competition Act 2002: Objective, Purpose and Salient Features. Concept of: - Agreements having Adverse Impact on Competition; Abuse of Dominant Position; Regulation of Combination; Criteria for determining "Appreciable Adverse Effect on Competition" and 'Dominant Position'; 'Relevant Geographic Market' Factors; 'Relevant Product Market' Factors. Complaints and Procedures.

Suggested Readings:

1. Aggarwal, V. K. *Consumer Protection: Law and Practice*. Bharat Law House, Delhi.
2. Girimaji, Pushpa. *Consumer Right for Everyone.* Penguin Books.
3. Nader, Ralph. *The Consumer and Corporate Accountability*. USA, Harcourt Brace Jovanovich, Inc.
4. How to Survive as a Consumer? CUTS, India www.cuts.org.
5. The Competition Act, 2002.
6. The Consumers Protection Act, 1986
7. The Bureau of Indian Standards Act 1986
8. The Food Safety and Standards Act 2005

Articles

1. Jain, Sanjay K., and Kaur, Gurmeet (2003). Strategic Green Marketing: How should Business Firms Go about Adopting It? *The Indian Journal of Commerce*. Vol.56. No.4. pp 1-16.
2. Jain, Sanjay K., and Kaur, Gurmeet (2004). Ecolabelling: Genesis, Issues and Perspectives. *Effulgence*. Vol.2. No.1. pp. 5-18.
3. Ralph L. Day and Laird E. Landon, Jr. (1997). Towards a Theory of Consumer Complaining Behaviour. Ag Woodside, et al. (eds.). *Consumer and Industrial Buying Behaviour*. New York; North Holland pp. 425-37.
4. Verma, D.P.S. (2002). Regulating Misleading Advertisements Legal Provisions and Institutional Framework. *Vikalpa*. Vol. 26. No. 2. pp. 51-57.
5. George, S. Day and A. Aaker (1970). A Guide to consumerism. *Journal of Marketing*. Vol. 34. pp 12-19.

Periodicals

1. Consumer Protection Judgements (CPJ) (Relevant cases reported in various issues).
2. Ethical Consumer (Magazine): ECRA Publishing Ltd. U.K www.ethicalconsumer.org
3. Upbhokta Jagran, Ministry of Consumer Affairs, Govt, of India.

Note: The Latest edition of text books may be used.

B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (c): BUSINESS TAX PROCEDURE AND MANAGEMENT

Duration: 3 hrs.

Objective: To provide basic knowledge of business tax procedures and management under different provisions of the Income tax.

Unit	Contents
Unit I	Advance payment of tax Tax deduction/collection at source, documentation, returns, Certificates Interest payable by Assessee/Government Collection and recovery of tax
Unit II	Assessment, re-assessment, rectification of mistakes Appeals and revisions - Preparation and filing of appeals with appellate authorities - Drafting of appeal; statement of facts and statement of law
Unit III	Penalties and prosecutions Settlement Commission Search, seizure and survey
Unit IV	Transactions with persons located in notified jurisdictional area General anti-avoidance rule Tax clearance certificate Securities transaction tax
Unit V	Information Technology and Tax administration TAN (Tax Deduction and Collection Account Number), TIN (Tax Information Network), e-TDS/e-TCS E-filing of ITRS

Suggested Readings:

1. Singhania, Vinod K., and Singhania, Monica. *Corporate Tax Planning and Business Tax Procedures.* Taxmann Publications Pvt. Ltd., New Delhi.
2. Ahuja, Girish., and Gupta, Ravi. *Corporate Tax Planning and Management.* Bharat Law House, Delhi.
3. Bajpai, Om Shanker. *Search, Seizure and Survey.* Taxmann Publications Pvt. Ltd., New Delhi.
4. Ahuja, Girish., and Gupta, Ravi *Systematic Approach to Income Tax.* Bharat Law House, Delhi.

Journals

1. *Income Tax Reports*, Company Law Institute of India Pvt. Ltd., Chennai.
2. *Taxman*, Taxmann Allied Services Pvt. Ltd., New Delhi.
3. *Current Tax Reporter*, Current Tax Reporter, Jodhpur.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (d): INTERNATIONAL BUSINESS

Duration: 3 hrs.

Objective: The objective of the course is to expose students to the concept, importance and dynamics of international business and India's involvement with global business operations.

Unit I
1. Introduction to International Business: Globalization and its growing importance in world economy; Impact of globalization; International business contrasted with domestic business - complexities of international business; Internationalization Stages and Orientations. Modes of entry into international business.

2. International Business Environment: National and foreign environments and their components – Physical, economic, demographic, cultural and political-legal environments; Global trading environment - recent trends in world trade in goods and services; Trends in India's foreign trade.

Unit II
3. International Trade –Theories of International Trade, tariff and non-tariff measures; Balance of payment account and its components.

4. International and Economic Organizations: WTO, UNCTAD, World Bank and IMF.

5. Regional Economic Integration: Forms of regional integration; Integration efforts among countries in Europe, North America and Asia. Cost and benefit of regional economic Integration.

Unit III
6. International Financial Environment: International financial system and institutions; Foreign exchange markets, Spot market, spot rate quotations, bid-ask spreads, Trading in spot markets, Cross exchange rates; Forward Market: forward rate, long and short forward positions, forward premium and discount. Arbitrage, hedging and speculation; Foreign investments - types and flows; Foreign investment in Indian perspective.

Unit IV
7. Exchange Rate Determination: Factors affecting exchange rate –Relative inflation rates, relative interest rates, relative income levels, government controls, expectations, etc. Government intervention and government influence on exchange rates. Theories of exchange rate – Purchasing Power Parity, Interest Rate Parity and Fisher's effect.

Unit V

8. Foreign Trade promotion measures and organizations in India: Special economic zones (SEZs) and 100% export oriented units (EOUs); Measures for promoting foreign investments into and from India; Indian joint ventures and acquisitions abroad.

Suggested Readings:

1. Charles, W.L. Hill., and Jain, Arun Kumar. *International Business*. New Delhi: Tata McGraw-Hill.
2. Johnson, Derbe., and Colin Turner. *International Business - Themes & Issues in the Modern Global Economy.* London: Roultedge.
3. Cherunilam, Francis. *International Business: Text and Cases*. Prentice Hall of India Ltd.
4. Daniels John, D. Lee H. Radenbaugh and David P. Sullivan. *International Business*. Pearson Education
5. Justin, Paul. *International Business*. Prentice Hall of India Ltd.
6. Michael R. Czinkota. et al. *International Business*. Fortforth: The Dryden Press.
7. RBI. Report on Currency & Finance, various issues.
8. Griffin, Ricky W. and Michael W. Pustay. *International Business - A Managerial Perspective.* Prentice Hall.
9. Sharan, V. *International Business*, Pearson Education.
10. Bennett, Roger. *International Business*. Delhi: Pearson.
11. UNCTAD Reports.
12. WTO, Annual Report, various issues.

Note: Latest edition of text books may be used.

B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (e): INDUSTRIAL RELATIONS AND LABOUR LAWS

Duration: 3 hrs.

Objective: To enable the students to learn the concepts of industrial relations including trade unions, collective bargaining, discipline and various labour enactments.

Unit I: Industrial Relations (IR)
Concept of Industrial Relations; Nature of Industrial Relations; Objectives of IR; Factors affecting IR in changing Environment, Evolution of IR in India; Role of State; Trade Union; Employers' Organisation; Human Resource Management and IR Role of ILO in Industrial Relations, International Dimensions of IR

Unit II: Trade Union
Trade Union: Origin and growth, unions after Independence, unions in the era of liberalisation; Factors Affecting Growth of Trade Unions in India, Multiplicity & Recognition of Trade Unions; Major Provisions of Trade Union Act, 1926.

Unit III: Discipline and Grievance Redressal
Discipline: Causes of indiscipline, Maintenance of discipline and misconduct; Highlights of domestic enquiries; Principle of Natural Justice; Labour turnover; Absenteeism; Grievance: Grievance: Meaning of Grievance, Grievance redressal machinery in India, Grievance handling procedure; salient features of Industrial Employment (Standing orders) Act 1946

Unit IV: The Industrial Disputes Act, 1947
Definitions of Industry, workman, and Industrial Dispute; Authorities under the Act: Procedure, Powers and Duties of Authorities; Provisions defining Strikes and Lock outs: Lay-off, Retrenchment and closure.

Unit V: The Factories Act, 1948
Provisions relating to Manufacturing Process, Workers, Occupier, Health, Safety, and Welfare facilities.

Suggested Readings:

1. Venkat Ratnam, C.S. *Industrial Relations*: Text and Cases, Oxford University Press, Delhi.
2. Sharma, J.P. *Simplified Approach to Labour Laws*. Bharat Law House (P) Ltd
3. Salamon, Michael. *Industrial Relations: Theory & practice*. Pearsonltigher Education.
4. Farnham., and Limlott, J.*Understanding Industrial Relations* Cassell.

Note: Latest edition of text books may be used.

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B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (f): BUSINESS RESEARCH METHODS AND PROJECT WORK

Duration: 3 hrs.

Objective: This course aims at providing the general understanding of business research and the methods of business research. The course will impart learning about how to collect, analyze, present and interpret data.

Section A: Business Research Methods
Unit I: Introduction
Meaning of research; Scope of Research in Business; Purpose of Research – Exploration, Description, Explanation; Unit of Analysis – Individual, Organization, Groups, and Data Series; Conception, Construct, Attributes, Variables.

Unit II: Research Process
An Overview; Problem Identification and Definition; Selection of Basic Research Methods-Field Study, Laboratory Study, Survey Method, Observational Method, Existing Data Based Research, Longitudinal Studies, Panel Studies.

Unit III: Measurement
Definition; Designing and writing items; Uni-dimensional and Multi- dimensional scales; Measurement Scales- Nominal, Ordinal, Interval, Ratio; Ratings and Ranking Scale, Thurstone, Likert and Semantic Differential scaling, Paired Comparison; Sampling –Steps, Types, Sample Size Decision; Secondary data sources.

Unit IV: Hypothesis Testing
Tests concerning means and proportions; ANOVA, Chi-square test and other Non-parametric tests, assumptions of Classical Normal Linear Regression.

Section B – Project Report
Unit V: Report Preparation
Meaning, types and layout of research report; Steps in report writing; Citations, Bibliography and Annexure in report; JEL Classification

Note:
1. There shall be a written examination of 50% Marks on the basis of Unit I to IV.
2. The student will write a project report under the supervision of a faculty member assigned by the college based on field work. The Project Report carries 50% Marks and will be evaluated by University appointed examiners.

Suggested Readings:

1. Babbie, Earl R. *The Practice of Social Research*. Wadsworth publication
2. Chawla, Deepak and Sondhi, Neena. *Research Methodology: Concept and Cases.*

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Vikas Publications

3. Webster, Allen L., *Applied Statistics for Business and Economics: An Essential Approach.* TMH
4. Cohen, J., Cohen, P.; West, S. G.; and Aiken L. S. *Applied Multiple Regression/Correlation Analysis For The Behavioral Sciences.* Routledge
5. Zikmund, W.G. *Business Research Method.* South Western Thomson Learning, USA
6. Emory, C. William. *Business Research Methods*, Homewood, Richard D. Irwin
7. Gujarati, Damodar., Dawn, C. Porter., and Gunasekar, Sangeetha. *Basic Econometrics* . Tata McGraw Hill.

Note: Latest edition of text books may be used.

<div align="center">

B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (g): NEW VENTURE PLANNING

</div>

Duration: 3 hrs.

Objective: The curriculum aims at giving exposure to students regarding different aspects of setting up a new business. After completing the course student should be able to develop an understanding of the process of identifying various sources of new business ideas of products and services. The understanding of this paper will help them to examine, evaluate and approach different sources of finance, the nature of marketing effort required and to develop a comprehensive business plan.

Unit I: Starting New Ventures
Opportunity identification. The search for new ideas. Source of innovative ideas. Techniques for generating ideas. Entrepreneurial imagination and creativity: The role of creative thinking. Developing your creativity. Impediments to creativity.

Unit II: Methods to Initiate Ventures
The pathways to New Ventures for Entrepreneurs, Creating New Ventures. Acquiring an established Venture: Advantages of acquiring an ongoing Venture. Examination of key issues. Franchising: How a Franchise works. Franchise law. Evaluating the franchising opportunities.

Unit III: Legal Challenges in Setting up Business
Intellectual Property Protection: Patents, Trademarks, and Copyrights. Requirements and Procedure for filing a Patent, Trademark, and Copyright. Legal acts governing businesses in India. Identifying Form of Organisation: Sole Proprietorship, Partnership, Limited Liability Partnership and Company.

Unit IV: The Search for Entrepreneurial Capital
The Entrepreneur's Search for Capital. The Venture Capital Market. Criteria for evaluating New-Venture Proposals. Evaluating the Venture Capitalist.
Financing stages. Alternate Sources of Financing for Indian Entrepreneurs. Bank Funding. Government Policy Packages. State Financial Corporations (SFCs). Business Incubators and Facilitators. Informal risk capital: Angel Investors.

Unit V: The Marketing Aspects of New Ventures
Developing a Marketing Plan: Customer Analysis, Sales Analysis and Competition Analysis. Market Research. Sales Forecasting. Evaluation. Pricing Decision.

Unit VI: Business Plan Preparation for New Ventures
Business Plan: Concept. Pitfalls to Avoid in Business Plan. Benefits of a Business Plan. Developing a Well-Conceived Business Plan. Elements of a Business Plan: Executive Summary. Business Description. Marketing: Market Niche and Market Share. Research, Design and Development. Operations. Management. Finances. Critical-Risk. Harvest Strategy. Milestone Schedule.
Suggested Case Studies: Case studies related to business or start ups in e-commerce, services, retailing, travel and hospitality.

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Suggested Readings:

1. Kuratko, D.F., and Rao, T. V. *Entrepreneurship: A South-Asian Perspective*. Cengage Learning.

2. Robert, H. M., Manimala, M. Peters., and D. Shepherd. *Entrepreneurship*. Tata McGraw Hill, India.

3. Barringer, B. R., and Ireland, R. D. *Entrepreneurship: Successfully Launching New Ventures*. Pearson Education, India.

4. Allen, K.R. *Launching New Ventures: An Entrepreneurial Approach*. Cengage Learning.

5. Hishrich, Peters. *Entrepreneurship: Starting, Developing and Managing a New Enterprise*. Irwin.

6. Ramachandran, K. *Entrepreneurship Development*. Tata McGraw Hill, India.

7. Roy, Rajeev. *Entrepreneurship*. Oxford University Press.

8. Kumar, Arya. *Entrepreneurship: Creating and Leading an Entrepreneurial Organization*. Pearson, India.

9. Holt, David H. *Entrepreneurship: New Venture Creation*. PHI Learning.

10. Nickels, William G., McHugh, James M., and M McHugh, Susan. *Understanding Business*. Tata McGraw Hill.

Note: Latest edition of the book may be used.

B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (h): FINANCIAL REPORTING AND ANALYSIS

Duration: 3 hrs.

Objective: To gain ability to understand, analyse and interpret the basic framework of financial reporting.

Unit I: Basics of Financial Reporting
Purpose of financial reporting, users of financial reports, conceptual framework for financial reporting.

Unit II: Understanding Financial Statements
Structure of Financial Statements: Introduction, Statement of Financial Position (Balance Sheet), Statement of Earnings (Income Statement), and Statement of Cash Flows (Cash Flow Statement).

Additional disclosure statements: Need for Additional Statements, Auditor's Report, Director's Report, Electronic Dissemination, Corporate Governance.

Unit III: Elements of Financial Statements
Inventories, Receivables, Assets (Fixed Tangible, Intangible), Leases, Revenue, Income-Tax, Retained Earnings.

Unit IV: Analysis & Interpretation of Financial Statements
Ratio Analysis – Liquidity, Solvency, Activity & Profitability Analysis, Comparative & Common Size Analysis (Vertical & Horizontal Analysis), Financial Statement Variation by Type of Industry

Expanded Analysis: Financial Ratios used in Annual Reports, Management's use of financial analysis, Graphing Financial Information

Unit V: Accounting Standards in India & IFRS- Basic Framework.

Suggested Readings:
1. Lal, Jawahar. *Corporate Financial Reporting: Theory & Practice*. Taxmann Applied Services, New Delhi.
2. Raiyani, J. R., and Lodha, G. *International Financial Reporting Standard (IFRS) and Indian Accounting Practices*. New Century Publications.
3. Singh, N. T., and Agarwal, P. *Corporate Financial Reporting in India*. Raj Publishing, Jaipur.
4. Hennie, V. G. *International Financial Reporting Standards: A practical guide*, Washington: World Bank.
5. Alexander, D., Britton, A., and Jorissen, A. *Global Financial Reporting and Analysis*. Cengage Learning, Indian edition.

Note: Latest edition of text book may be used.

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B.Com. (Hons.): Semester - VI
Paper: BCH-6.4 DSE Group B (i): COMPENSATION MANAGEMENT

Duration: 3 hrs.

Objective: To enable the students to design and administer a compensation system that rewards employees fairly while stimulating them to provide goods and services that satisfy customer demands and permitting the organisation to operate profitably.

Unit I: Compensation Management
Concept, principles and practices; Consequences of pay dissatisfaction.

Unit II: Foundations of Compensation
Performance evaluation, Job evaluation – Job grading and Job design; Theories of Compensation; Executive Compensation.

Unit III: Compensation Strategy and Policy
Developing Strategic Compensation alternatives; Challenges of compensation design; broad bending; compensation policies in India.

Unit IV: Components of Compensation
Basic Pay, D.A. Incentives Plans; Profit Sharing Schemes; Employee Stock Ownership; Fringe benefits & retirement benefits, provident fund, gratuity, pension.

Unit V: International Compensation Management
Components of International Compensation package; approaches to international compensation.

Unit VI: Compensation Laws
Payment of Wages Act, Minimum Wages Act., Bonus Act., Payment of Gratuity Act., Employees State Insurance Act., and Workmen's Compensation Act.

Suggested Readings:
1. Armstrong, M., & Murlis, Hellen. *Reward Management. A handbook of Remuneration Strategy.*
2. Dwivedi, R.S. *Managing Human Resources; Personnel Management in the Indian Enterprises.* Galgotia Publishing Co.
3. Venkataratnam, C.S., & Srivastava, B. K. *Personnel Management and Human Resources.* Tata McGraw Hill.
4. Thomas, J. Bergman., Scarpllo, V.G., and Hills, F.S. *Compensation Decision Making.* Dryden Press.
5. Dunn, J.D., and Rachal, F. M. *Wage and Salary Administration: Total Compensation System.* McGraw Hill, New York.
6. George, T. Milkovich., and Newman, J.M. *Compensation.* Irwin.
Note: Latest edition of text book may be used.

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Head Department of Commerce
Delhi School of Economics
University of Delhi
DELHI-110007

University of Delhi

Master of Arts (Economics)

(Effective from Academic Year 2019-20)

Programme Brochure

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1

Department of Economics

Reckoning from the appointment of V. K. R. V. Rao as Professor in 1942, the Department of Economics of the Delhi School of Economics (henceforth, the Department) is one of the oldest departments of the University of Delhi. The Delhi School of Economics was set up in 1949 as an institution for advanced studies and research in economics, on the initiative of the Founder-Director Professor Rao, with Prime Minister Jawaharlal Nehru as its President. Since then, the Department has been at the forefront of postgraduate teaching and research in economics. At present, it is one of the three constituent departments of the Delhi School of Economics, the other two being Geography and Sociology.

The Department supports postgraduate programmes (M. A., M. Phil., and Ph. D.) in Economics, which draw a huge number of applicants from all over the country and many from abroad. These programmes have a strong theoretical and quantitative focus with an emphasis on empirical applications. Their hallmark is the dynamic curriculum offered, which is continuously reviewed and updated in line with the latest developments in the discipline.

The Department is proud of its many past faculty members who have made significant contributions to the Economics discipline. Among them is the Nobel laureate Amartya Sen and many Fellows of the Econometric Society, a much coveted honour in the field of Economics.

The Department is also proud of its numerous alumni who have gone on to distinguished academic careers, including many Fellows of the Econometric Society. Department alumni can be found in most major Economics, Business, and Public Policy departments worldwide, very often as members of the faculty, and even more commonly, as doctoral students.

Apart from purely academic distinctions, members of the Department have contributed to the task of institution-building in various capacities. The founder, Professor Rao, went on to become the Vice Chancellor of Delhi University, served as the Education minister in the central government, and also founded other important academic institutions. Another former member of the Department, Professor Manmohan Singh, served as Governor of the Reserve Bank of India, union Finance Minister, and later Prime Minister of India. Numerous other members of the Department served the nation as high-level economic officials or advisers to the government and international bodies, as members of the Planning Commission, and as regulators or members of important government Commissions and committees. Others have served as public intellectuals and as public-spirited activists.

While the Department's alumni have traditionally found jobs and attained considerable eminence in academia, the civil services, NGOs, international organisations and the media, the number of alumni in finance, consultancy and other areas of the private sector has grown

manifold in the past two decades.

In 1965, the Department was the first economics department in the country to be recognised by the University Grants Commission as a Centre for Advanced Studies, a distinction that it continues to hold to the present day. The present Department is building on this evolving tradition and continues to perform the functions of academic research, teaching and public service. Current faculty have published their research in leading Indian and international professional journals, and have won prestigious international and Indian awards and fellowships. Their specialisations span a wide range of areas in economics. For many years, the Department has been ranked the highest amongst university economics departments in India by RePEc (Research Papers in Economics), a global electronic archive of working papers and publications in Economics and Finance (`http://ideas.repec.org/top/top.india.html`). Apart from pursuing their individual research programmes, several members of the faculty also serve on committees of various government departments and public sector organisations, and on the governing bodies or academic councils of important academic institutions.

2

Choice based credit system

2.1 Introduction

The Choice based credit system (henceforth, CBCS) provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective, and skill-based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Grading system provides uniformity in the evaluation and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations which enables the student to move across institutions of higher learning. The uniformity in the evaluation system also enables the potential employers to assess the performance of the candidates.

2.2 Definitions

1. 'Academic programme' means the entire course of study comprising its structure, course details, evaluation schemes, etc.

2. 'Course' means a segment of a subject that is part of an Academic programme.

3. 'Programme structure' means a list of courses (Core, Elective, open Elective) that makes up an Academic programme, specifying the syllabus, credits, hours of teaching, evaluation and examination schemes, minimum number of credits required for successful completion of the programme, etc., prepared in conformity with Delhi University rules.

4. 'Core course' means a course that a student admitted to the M. A. Economics programme must successfully complete to receive the degree and which cannot be substituted by any other course.

5. 'Elective course' means an optional course that is to be selected by a student out of a menu of such courses offered by the Economics department.

6. 'Open Elective' means an elective course that is available for students of all programmes, including students of the Economics department. Students of other departments may opt for these courses, subject to fulfilment of eligibility criteria as laid down by the Economics department.

7. 'Credit' means the value assigned to a course indicating the level and quantity of instruction as measured by instructor-student interaction.

8. 'SGPA' means Semester Grade Point Average calculated for individual semester.

9. 'CGPA' is the Cumulative Grade Points Average calculated for all courses completed by the students at any point of time. CGPA is calculated each year for both the semesters clubbed together.

10. 'Grand CGPA' is calculated in the last year of the course by clubbing together the CGPA of two years, i.e., four semesters. Grand CGPA is given in Transcript form. A formula for conversation of Grand CGPA into percentage marks is given in the Transcript.

2.3   Programme

Objectives

The Master of Arts (M. A.) programme in Economics reflects new developments in the Economics discipline. The curriculum has a strong theoretical and quantitative focus with all students being trained in the use of computers and statistical software that they find useful in their professional careers in academia, research institutions, government, and industry. The programme is semester-based and includes a large number of elective courses which allow students to pursue their varied interests and to specialise in their fields of choice.

Entry into the programme requires superior analytical, mathematical, and quantitative skills. The ability to write coherently and analytically in English is very important. The programme will further hone these skills in the context of the Economics paradigm. At the end of the programme, the student should be able to bring to bear these skills to the modelling and analysis of a wide range of theoretical and applied problems in Economics and to the understanding and solution of real world economic and social problems.

Structure

The M. A. Economics programme is spread over two years. Each year is divided into two semesters. The programme requires students to take a combination of Core courses, Elective courses, and Open Elective courses. A student is required to complete a minimum of 80 credits for the completion of the programme and the award of the M. A. Economics degree.

Depending on the nature of the course, instruction consists of lectures combined with computer labs, tutorials, and preceptorials. The labs provide students the opportunity for hands-on learning of programming, statistical, and econometric techniques. Tutorials are small-group interactions in a classroom setting that complement the lectures and support problem-solving related to the lectures. Preceptorials are small-group or individual interactions meant for intensive problem-solving (possibly beyond the lecture material), supervision of guided reading and research, and discussions ranging beyond the lecture material.

The semester-wise distribution of courses and credits is as follows:

Core courses and credits

Semester	Core Courses	Credits per course	Credits per semester
I	EC001, EC002, EC003	6	18
II	EC004, EC005, EC006	6	18
III	Nil	Nil	Nil
IV	Nil	Nil	Nil

Elective courses and credits

Semester	Elective Courses	Credits per course	Credits per semester
I	Nil	Nil	Nil
II	One elective course from those available for this semester	5	5
III	Four elective courses from those available for this semester; one of these may be an Open Elective	5	20
IV	Four elective courses from those available for this semester; one of these may be an Open Elective	5	20

Semester	Open Elective Courses	Credits per course	Credits per semester
I, II, III, IV	One open elective course from those available for this semester	4	4

Selection of elective courses

A student's choice of elective courses in each semester will be limited to those announced by the Department at the beginning of that semester. Each student is required to finalise his/her choice of elective courses within two weeks of the start of each semester.

On account of infrastructural constraints, the Department may limit the number of students in an elective course, typically on the basis of performance in a designated prior course. Such requirements will be announced at least one semester in advance.

Elective courses may have prerequisites, which may be Core courses or Elective courses.

Teaching

The faculty of the Department is responsible for organising lecture and tutorial work for the M. A. programme. There shall be 90 instructional days, excluding examinations, in a semester.

Eligibility for admission

All admissions are done *via* the Direct/Merit mode or the Entrance test mode. The eligibility conditions for **Indian students (unreserved category)** *via* these modes are

- Direct/Merit mode: At least 60% or equivalent CGPA in the aggregate of the B. A. Economics (Hons.) of the University of Delhi.

- Entrance test mode: At least 60% or First Division or equivalent CGPA in any graduate/post-graduate degree in any subject from the University of Delhi or any Indian University recognised by the University of Delhi.

Relaxations of these conditions for **categories other than the Unreserved category** are as *per* the rules stated in the Information Bulletin of Delhi University.

Although the University does not require **foreign students** to take the entrance test, foreign nationals are advised to, either take the Department's entrance test, or submit their GRE scores along with recommendation letters from two academic referees, in order for the Department to evaluate their suitability for the M. A. programme. Those who choose to take the entrance test must apply on the prescribed on-line form by the due date. Those who do not wish to take the entrance test should familiarise themselves with the material covered in the textbooks recommended for the entrance test, so as to ensure that they have the aptitude and training for the M. A. courses offered by the Department. No matter which option they choose, all foreign nationals must route their applications through

Foreign Students' Registry Office
Room No. 11, First Floor
Conference Centre
University of Delhi
Delhi 110007

Telephone: 011-27666756
Web: http://fsr.du.ac.in/
Email: fsr_du@yahoo.com, fsr@du.ac.in

Admission test

Candidates are expected to be familiar with the material contained in the current syllabus of the B. A. (Honours) Economics programme of the University of Delhi. The examination will test a candidate's ability to *understand and apply* concepts in four basic areas in Economics: (a) microeconomic theory, (b) macroeconomic theory, (c) mathematical techniques used by economists, and (d) probability, statistics, and elementary econometrics. Apart from these, some general questions testing the reasoning and quantitative abilities of the students may also be asked.

Some indicative, but not exhaustive, references that may be used to prepare for the test are:

O. Blanchard: *Macroeconomics, 5th ed.*, Pearson Education (2009)

W. Branson: *Macroeconomic Theory and Policy, 3rd ed.*, East-West Press (2005)

J. Devore: *Probability and Statistics for Engineers, 8th ed.*, Cengage Learning (2012)

R. Dornbusch, S. Fischer, R. Startz: *Macroeconomics, 11th ed.*, McGraw-Hill (2010)

C. Dougherty: *Introduction to Econometrics, 4th ed.*, Oxford University Press (2011)

R. Gordon: *Macroeconomics, 12th ed.*, Prentice-Hall (2011)

D. Gujarati, D. Porter: *Essentials of Econometrics, 4th ed*, McGraw-Hill (2010)

C. Jones: *Introduction to Economic Growth, 2nd ed.*, W. W. Norton (2002)

N. Mankiw: *Macroeconomics, 6th ed.*, Worth Publishers (2010)

F. Mishkin: *Macroeconomics: Policy and Practice*, Pearson Education (2012)

C. Snyder, W. Nicholson: *Fundamentals of Microeconomics*, Cengage Learning (2010)

K. Sydsaeter, P. Hammond: *Mathematics for Economic Analysis*, Pearson Education (2002)

H. Varian: *Intermediate Microeconomics, 8th ed.*, W. W. Norton (2010)

Please consult the University's Bulletin of Information at
http://www.du.ac.in/adm2019/postgraduate.html
for detailed instructions regarding the Admission test.

Assessment and examinations

English shall be the medium of instruction and examination.

Assessment of a student's performance in a course shall be based on marks for Internal Assessment and the Final Examination in the relevant course, as *per* Delhi University's rules.

Pass percentage and promotion criteria

These will be specified by Delhi University.

Marks, grades, and classes

Conversion of marks in courses into grade points, SGPA, CGPA, grand CGPA, and class will be done as *per* Delhi University rules.

Span period

No student shall be admitted as a candidate for the examination for any of the Parts/Semesters after the lapse of four years from the date of admission to the Part-I/Semester-I of the M. A. Economics Programme.

Internal assessment marks

Internal assessment will be based on multiple mid-term examinations, presentations, or projects. The appropriate mode of assessment for a course is chosen by the course instructor.

3

Core courses

3.1 Microeconomic Theory: EC001

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 6 hours.

- **Credits** : 6.

- **Course Objectives**

  The purpose of this course is to give students a rigorous introduction to modern microeconomic theory.

- **Course Learning Outcomes**

  Three main learning outcomes are envisaged. First, the student should develop a sound understanding of the core concepts that economists use to understand the world of business, trade and public policy. By the end of the course, thinking like an economist should become second nature. Second, the course will familiarize students with the mathematical techniques that economists routinely use in their analysis. Modern economics makes heavy use of mathematics and statistics that advanced students must master. Finally, we will try to illustrate the usefulness of the abstract ideas and concepts introduced in the course with the aid of suitable applications to real world problems.

- **Content: Unit-wise**

  1. Prices, Markets and Efficiency - Voluntary exchange, Pareto efficiency, quasilinear utility, cost functions, demand and supply, market equilibrium, comparative statics, taxes and subsidies, public goods, externalities.

  2. Choice theory and Consumer Demand - The axiomatic approach, utility representation, demand and expenditure functions, duality, Slutsky decomposition, testable implications.

  3. Production, Costs and the Firm - Production possibility sets, cost minimization and profit maximization, input demand and output supply, non-profit motives.

  4. Monopoly - Profit maximization, dead-weight loss, price discrimination, monopolistic screening.

5. Choice under Uncertainty - The von-Neumann-Morgenstern axioms and expected utility theory, risk aversion, portfolio choice.

6. General Equilibrium Analysis: Barter; Core of Exchange economy; Market exchange; General equilibrium models of exchange and production; Existence of competitive equilibria; Competitive equilibrium as Core allocation Uniqueness and Stability of Competitive equilibrium; Comparative statics.

   Welfare Properties of Competitive Equilibria - First and Second Fundamental Theorems of Welfare Economics; Efficiency and fairness of Market wage; Factor Price Equalization Theorem.

7. Welfare Economics: Welfare Criteria - Fairness; Pareto optimality; Kaldor efficiency; Scitovsky Criterion; Samuelson Criterion; Cost Benefit Analysis.

   Social Choice; Social Welfare Function; Arrow's Impossibility Theorem and the related results.

8. Market Failures: Market failure; Sources of market failure and their implications Externalities; Public Good.

- **Suggested Readings**

  Bolton, P. and M. Dewatripont (2005): *Contract Theory.* MIT Press.

  Diamond P. and Stiglitz J. (1974): Increases in risk and in risk aversion, *Journal of Economic Theory* 8, 337-360.

  Jehle, G. and P. Reny (2001): *Advanced Microeconomic Theory*, Addison Wesley.

  Laffont, J-J, and D. Martimort (2002): *The Theory of Incentives - the Principal Agent Model*, Princeton University Press.

  Laffont, J-J and J. Tirole (1986): Using Cost Observation to Regulate Firms, *Journal of Political Economy*, 94(3): 614-41.

  Mas-Collel, A., M. Whinston and J. Green (1995): *Microeconomic Theory*, 2nd ed. Oxford University Press

  Maskin, E. and J. Riley (1984): Monopoly with Incomplete Information, *Rand Journal of Economics*, 15: 171- 96.

  Mirrlees, J. (1971): An exploration in the theory of optimum income taxation,*Review of Economic Studies* 38: 175-208.

  Pratt, J. (1964): Risk aversion in the small and in the large, *Econometrica* 32, 122-136.

3.2   Mathematics for Economics: EC002

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 6 hours.

- **Credits** : 6.

- **Course Objectives**

  The objective is to rigorously introduce and teach several areas of mathematics that are widely-used in Microeconomics, Macroeconomics and Econometrics.

- **Course Learning Outcomes** The approach of the course will be analytical, so that we expect as a learning outcome that students can go beyond cookbook procedures when modelling and analyzing economic problems. A second learning outcome will be the acquisition of some mathematical sophistication, in understanding and writing proofs. These will be complemented by a basic learning outcome, which is to understand the main optimization and other tools used in a variety of economic applications.

- **Content: Unit-wise**

  1. Preliminaries: Sets, relations, functions.
  2. Linear Algebra:

     Vector spaces, subspaces.

     Convex sets, concave and quasiconcave functions, their characterisations.

     Linear independence. Linear mappings and matrix representation. Range, null space, rank-nullity theorem.

     Projection mappings and inverse mappings. Solutions of linear equations.

     Inner product and normed spaces. Orthogonality. Orthogonal projectors and distance-minimising property. Symmetric matrices. Quadratic forms.

     Spectrum of matrix, diagonalisation, similarity of matrices.

  3. Basic Real Analysis:

     In normed spaces, notions of open, closed and compact sets, continuous functions, their optima and their existence.

     Notions of differentiability of mappings between Euclidean spaces, chain rule, higher order derivatives.

     Implicit and inverse function theorem, comparative statics.

  4. Optimization:

     Characterisations of differentiable concave and quasiconcave functions. Characterisation of interior optima.

     Lagrange characterisation of optima subject to equality constraints.

     Karush-John-Kuhn-Tucker characterisation of optima subject to inequality constraints.

  5. Differential Equations: First-order and systems of first-order differential equations (linear and nonlinear); some stability theory.

- **Suggested Readings**

  Abbott, S. (1997): *Understanding Analysis*, Springer.

  Apostol, T. (1991): *Calculus, Volumes 1 and 2*, Wiley.

Simmons, G. and Krantz, S. (2006): *Differential Equations*, McGraw Hill.

Strang, G. (2006):*Linear Algebra and its Applications*, Thomson Brooks/Cole.

Sundaram, R. (1996): *A First Course in Optimization Theory*, Cambridge University Press.

3.3 Introductory Econometrics: EC003

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 6 hours.

- **Credits** : 6.

- **Course Objectives**

  The first half of the course covers basic concepts in probability and mathematical statistics that are needed for the study of econometrics. The second half introduces basic econometric techniques commonly used in the empirical analysis of economic relationships and other social sciences.

- **Course Learning Outcomes**

  Students would acquire theoretical knowledge of statistics and basic econometric techniques used in the empirical analysis of economic relationships. They will undergo hands-on training in the use of software to select random samples, compute numerical counterparts of theoretical results and estimate empirical models.

- **Content: Unit-wise**

  1. Probability, Random Variables, Distributions:
     Sample spaces, Counting methods, Conditional Probability, Bayes' Theorem.
     Discrete, continuous and mixed random variables, marginal and conditional distributions, multivariate distributions, distributions of functions of random variables. Expectations, conditional expectations and other moments.
  2. Estimation: Properties of estimators, sufficient statistics, maximum likelihood estimation.
  3. Sampling Distributions, Aymptotic Distribution Theory:
     Large Sample Results: Laws of large numbers and central limit theorems.
     Sampling Distributions of Estimators: The Chi-square, t and F distributions.
  4. Hypothesis Testing: Definition of a statistical test. Size, significance and power. Likelihood ratio tests and the Neyman Pearson Lemma. Uniformly most powerful tests, t and F tests for moments of a distribution.
  5. Linear Regression:
     Simple Linear Regression - Ordinary Least Squares (OLS) Estimation; Desirable properties of least squares estimators; Goodness-of-Fit; Normality assumption for the errors; Maximum likelihood estimation.

Multiple Linear Regression: Ordinary Least Squares (OLS) Estimation; Underlying assumptions; Goodness-of-Fit.

Dummy variables in regression models: Qualitative regressors; qualitative and quantitative regressors; interaction terms.

Multicollinearity, Heteroscedasticity, Autocorrelation: Nature; implications; detection; remedies

6. Dynamic Models:
   ARIMA models: AR, MA, and ARMA processes
   Distributed lag models

7. Model specification: Model selection criteria

8. Panel data regression: Fixed effects LSDV model; Fixed effects within-group model; Random effects model.

- **Suggested Readings**

DeGroot, Morris H. and Schervish, Mark. J. (2012): *Probability and Statistics*, 4th edition, Addison-Wesley.

Gujarati, D.N. and Porter, D.C. (2008): *Basic Econometrics*, McGraw-Hill, New York.

Hogg, Robert V.; Makean, J and Craig, Allen T. (2014): *Introduction to Mathematical Statistics*, Prentice Hall, 7th edition

Hwang, Jessica and Blitzstein, Joseph (2014): *Introduction to Probability*, CRC Press.

Stock, James H. and Watson, Mark W. (2011): *Introduction to Econometrics*, Pearson Education Inc.

Wooldridge, Jeffrey (2012):*Introductory Econometrics: A Modern Approach*, South-Western.

3.4 Macroeconomic Theory: EC004

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 6 hours.

- **Credits** : 6.

- **Course Objectives**

The objective of the course is to familiarise the students with (a) the concepts and issues in modern macroeconomics, as is applied in theory and practice across the world; (b) the major mathematical tools used in modern macro analyses.

The course has two modules of 4 units each. The first module begins with a brief discussion of the short run (static) aggregative macro frameworks and explore the implications of different policy changes for the macroeconomy. It then focuses on long run output dynamics, i.e., issues related to economic growth. The second module focuses on medium run dynamics as captured by business cycles, paying special attention to the Real Business Cycles theory and the New Keynesian framework.

- **Course Learning Outcomes**

Two central questions that motivate Macroeconomics are: (i) What causes aggregate output and employment levels in an economy to fluctuate/change over time? (ii) how effective are government policies in stabilizing the economy and/or generating steady growth? This course will provide the students with a deeper understanding of both these issues in the context of the real economy and will enable them to evaluate various macroeconomic policies and their implications on the basis of coherent theoretical frameworks.

- **Content: Unit-wise**

  1. Aggregative Macro Models: The classical system; the Keynesian system; Role of expectations in the aggregative framework; various theories of expectation formation; solving aggregative macro models with different assumptions about expectation formation and their policy implications.

  2. Mathematical Preliminaries:

     Methods of solving Ordinary Difference Equations; Systems of first-order difference equations; Steady states, Stability, Phase Diagrams, Linearization.

     Infinite Horizon Optimization in Discrete Time: Stationary Dynamic Programming with Discounting; Euler Equations and Transversality Condition; Solution techniques.

  3. Microfounded Macro Models:

     Lucas Critique and the need for microfoundations; the Dynamic General Equilibrium (DGE) approach to macro analysis: optimization problem of a representative household; optimization problem of a representative firm.

  4. Growth and Overlapping Generations models:

     Neoclassical Growth Models - The Solow model; The Ramsey-Cass-Koopmans model; The Samuelson-Diamond Overlapping Generations model.

     Endogenous Growth Models - the Basic AK-Model; Models with Externalities.

  5. Basic Factors of Business Cycles: Evidence and Issues

  6. Stochastic difference equations: First-Order Linear Systems; Scalar Linear Rational Expectations Models; Multivariate Linear Rational Expectations Models.

  7. Real Business Cycle Theory - basic structure with and without labour; Money in utility; Effectiveness of Monetary Policy.

  8. New Keynesian Model - basic framework, price stickiness (Calvo and Rottenberg), optimum pricing, dynamic IS and new Philips curve, monetary policy effectiveness. Monetary Policy Design: Rule vs Discretion. Sticky Wages and Unemployment.

- **Suggested Readings**

Acemoglu, D. (2009): *Introduction to Modern Economic Growth*, Princeton University Press.

Gali, Jordi (2015): *Monetary Policy, Inflation, and the Business Cycle*, 2nd Edition, Princeton University Press.

Galor, O. (2010): *Discrete Dynamical Systems*, Springer-Verlag.

Minford, P. and Peel. D. (2019): *Advanced Macroeconomics: A Primer*, 2nd Edition, Edward Elgar.

Romer, D. (2012): *Advanced Macroeconomics*, 4th edition, New York: McGraw Hill.

Sorensen, P.B. and Whitta-Jacobsen, H.J. (2010): *Introducing Advanced Macroeconomics: Growth and Business Cycles*, 2nd Edition, McGraw-Hill.

Wickens, M. (2011): *Macroeconomic Theory*, 2nd edition, Princeton University Press.

3.5 Introduction to Game Theory: EC005

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 6 hours.

- **Credits** : 6.

- **Course Objectives**

  Game theory, which systematically studies strategic interactions, is an important tool for economists. The main goal of this course is to introduce the basic concepts of Game theory and to illustrate its importance in explaining various kinds of economic and social phenomena.

- **Course Learning Outcomes**

  To learn static and dynamic game models with complete and incomplete information. Learn and apply the main equilibrium concepts of noncooperative game theory, as well as learn procedures of iterated dominance. Learn some major applications such as Auctions, Bargaining, Repeated Games, Signaling and Screening.

- **Content: Unit-wise**

  1. Games with perfect information

     (a) Strategic form games: Dominated strategy, Nash and mixed strategy Nash equilibrium, Iterated elimination
     (b) Extensive form games: Action and strategy, Nash Equilibrium, Subgame perfect Nash equilibrium, One-deviation property and backward induction
     (c) Repeated games: Finitely and infinitely repeated game,
     (d) Bargaining: Alternating offers bargaining: Finite and infinite horizon

  2. Games with Imperfect Information

     (a) Imperfect information and Subgame perfection: Information Set, Mixed and behavioural strategies
     (b) Static games of incomplete information: Bayesian Nash equilibrium, Harsanyi transformation, Auction

   (c) Dynamic games of incomplete information: Perfect Bayesian Equilibrium, Signaling games, Reputation games, Intuitive Criterion

   (d) Information Economics: Adverse selection, Monopolistic Screening, Moral hazard

- **Suggested Readings**

  Fudenberg, D. and Tirole, J. (1991), *Game Theory*, MIT Press.

  Gibbons, R. (1992), *A Primer in Game Theory*, Prentice-Hall.

  Mas-Colell, A.; Whinston, M. and Green, J. (2006): *Microeconomic Theory*, Oxford University Press.

  Osborne, M. (2004): *An Introduction to Game Theory*, Oxford University Press.

  Osborne, M. and Rubinstein, A. (1994): *A Course in Game Theory*, MIT Press.

3.6   Economic Development and Policy in India: EC006

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 6 hours.

- **Credits** : 6.

- **Course Objectives**

  The aim of this course to familiarise students with recent research on issues concerning economic development and policy in India, with an emphasis on contemporary debates, and to train them in the conduct of policy analysis using the tools of economics. In particular, the course will help students to understand the application of economic theory, and the statistical and econometric techniques that they are taught in other courses. The approach is modular, and will vary with time, depending on the nature of current policy discourse and the expertise of the instructor.

- **Course Learning Outcomes** Students will have the tools to understand current policy debates and contribute to policy making in an informed way. They will also learn how to conduct independent research in these areas.

- **Content: Unit-wise**

  1. Poverty and inequality
  2. Food and nutrition
  3. Economic reforms and industrial performance
  4. Agriculture

- **Suggested Readings**

Aghion,P.; Burgess, R.; Redding, S.J. and Zilibotti F. (2008): The Unequal Effects of Liberalization: Evidence from Dismantling the License Raj in India, *American Economic Review*.

Birthal, P.; Negi, D.; Khan, Md. and Agarwal, S. (2015): Is Indian agriculture becoming resilient to droughts? Evidence from rice production systems, *Food Policy*.

Chaurey, R. (2015): Labor regulations and contract labor use: Evidence from Indian firms, *Journal of Development Economics*.

Das, S.; Ghate, C. and Robertson, P. (2015): Remoteness, urbanization and India's unbalanced growth, *World Development*.

Fishman, R.; Lall, U.; Modi, V. and Parikh, N. (2016): Can electricity pricing save India's groundwater? Evidence from a novel policy mechanism in Gujarat, *Journal of the Association of Environmental and Resource Economists*.

Gaiha, R.; Jha, R. and Kulkarni, V. (2015): Affluence, Obesity and Non-communicable diseases in India, in Gaiha et al., Diets,*Malnutrition and Disease*, Oxford University Press.

Gangopadhyay, S. Lensink, R. and Yadav, B. (2015): Cash or in-kind transfers? Evidence from a randomised control trial in Delhi, India, *Journal of Development Studies*.

Kaushal, N. and Muchomba, F. (2015): How consumer price subsidies affect nutrition, *World Development*.

Mukim, M. (2015): Coagglomeration of formal and informal industry: Evidence from India, *Journal of Economic Geography*.

Sanga, P. and Shaban, A. (2017): Regional divergence and inequalities in India, *Economic and Political Weekly*.

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Elective Courses

4.1 Microeconomics

4.1.1 Mathematical Economics: EC101

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course is designed for students who plan to do further graduate level work in economic theory, especially those with a keen interest in creating, as opposed to consuming, pure theory.

- **Course Learning Outcomes** The course aims for students to learn the following: (1) a rigorous exposure to a selection of basic mathematical tools that are used by economic theorists, and (2) applications of these methods to some areas of economic theory including duality theory, game theory, the Arrow-Debreu model and comparative statics.

- **Content: Unit-wise**

  1. Set theory and preliminaries
  2. Topological Spaces:
     Metric spaces, topological spaces and continuous functions; various useful constructions, e.g., projective and inductive topologies
     Countability and separability properties
     Compactness, completeness, connectedness, etc.
     Topologies on function spaces; linear spaces, weak topologies; topologies on space of probability measures
     Convex analysis; separation theorems
     Set-valued mappings, fixed point theorems
  3. Arrow-Debreu model: existence and optimality

4. Debreu-Scarf theorem

5. Duality theory

6. Nash's existence theorem

7. Lattices, supermodularity and comparative statics

- **Suggested Readings**

  Aliprantis, C., Brown, D. and Burkinshaw, O. (1990): *Existence and Optimality of Competitive Equilibria*, Springer-Verlag.

  Berge, C. (1963): *Topological Spaces*, Macmillan.

  Debreu, G. (1959): *Theory of Value*, Yale University Press.

  Hildenbrand, W. and Kirman, A. (1988): *Equilibrium Analysis*, North-Holland (1988).

  Munkres, J. (1975): *Topology: A First Course*, Prentice-Hall.

4.1.2   Contract Theory: EC102

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  Contracts are the bedrock for functioning of the market as well as non-market economic systems. Unsurprisingly, the study of contracts and the associated incentive structures has been a major preoccupation of thinking and research in Economics. Most of the real world contractual settings are characterized by conflict of interests as well as asymmetry of information among the individuals involved. Accordingly, this course examines the incentives and outcomes for various contractual settings, covering contracts used by the market as well as non-market economic systems.

- **Course Learning Outcomes**

  The learning outcomes of the course are as follows: First, students successfully completing this course will enhance their skill to develop formal analytical framework to examine the contractual settings and the economic systems covered in the course. Second, they will learn about incentive structures for the individuals and firms involved. Finally, they will learn to draw policy conclusions about optimal contracts for various settings covered in the course.

- **Content: Unit-wise**

  1. Decision Making Under Uncertainty:
     The Expected Utility Theorem; Money Lotteries; Measure of Risk aversion; Comparing Risk aversion; Comparison of risky alternatives, Insurance.

2. Hidden Information and Adverse Selection:

   The first-best versus the second-best in presence of informational asymmetry; Single-crossing condition and monotonicity of choice; The Revelation Principle; The Rent Extraction versus Allocative Efficiency Tradeoff; Screening and its applications - Credit Rationing, Regulation, Insurance; Signalling and its applications.

3. Hidden Action and Moral Hazard:

   The basic principal-agent problem; Rent Extraction-Efficiency Tradeoffs, The first-order approach; Linear and Non-linear Contracts; Insurance Contracts; Value of information; Adverse selection with Moral hazard; Multi-task moral hazard; Relational Contracts.

4. Competition and Moral hazard in Teams:

   Competition among agents; Symmetric and Asymmetric Competitions; Relative performance evaluation; Multi-agent moral hazard; Moral hazard in teams; Firm as a team.

5. Incomplete Contracts:

   Basic framework; Verifiability; Hold-up problem and its consequences; Market and Non-market Organizations; Markets and contracts; Foundations of Incomplete Contracts; Procurement Contracts for Public Goods; Short-term versus Long-term Procurement Contracts; Public versus Private ownership; Public Private Partnerships.

- **Suggested Readings**

  The detailed reading list will contain those below along with several papers for each section.

  Bolton, P. and Dewatripont, M. (2005): *Contract Theory*, MIT Press.

  Hart, O. (1995): *Firms, Contracts and Financial Structure*, Oxford University Press.

  Laffont, J. and Martimort, D. (2002), *The Theory of Incentives*, Princeton University Press.

  Mas-Collel, A.; Whinston, M. and Green, J. (1995): *Microeconomic Theory*, Oxford University Press

  Singh, R. (2018): 'Public-private Partnerships vs. Traditional Contracts for Highways', *Indian Economic Review*, Vol. 2, 29-64.

4.1.3 Game Theory: EC103

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The primary objective of this course is to make the student familiar with some of the core ideas, methods and results of noncooperative game theory; a secondary objective is to show the theory in use in substantive economic applications.

- **Course Learning Outcomes**

  The student will learn the rigorous language of game theory, and the important theorems that underpin noncooperative game theory. By the end of the course, the student is expected to be able to develop the facility of using some of these tools to model and analyze situations of conflict and cooperation.

- **Content: Unit-wise**

  1. Formal representation of a non-cooperative game in extensive form. Important notions: information; pure, mixed, and behaviour strategies; Kuhn's theorem; equivalence notions.
     Normal form games. Agent-normal form. Connections with extensive form games. Interpretation of mixed strategies.

  2. Equilibrium notions. Dominant strategy equilibrium, iterated domination arguments, rationalisability. Nash equilibrium: Nash's existence theorem. Subgame perfect equilibria.

  3. Special classes of games: perfect information games and constant-sum games.

  4. Supermodular games, monotone comparative statics.

  5. Economic applications: oligopoly theory, some dynamic games applications.

  6. Incomplete information games. Mechanism design and implementation theory. Revelation principles.

  7. Economic applications, including auction theory and regulation theory.

- **Suggested Readings**

  Fudenberg, D. and Tirole, J. (1991): *Game Theory*, MIT Press.

  Mas-Colell, A.; Whinston, M. and Green, J. (1995): *Microeconomic Theory*, Oxford University Press.

  Myerson, R. (1991): *Game Theory: Analysis of Conflict*, Harvard University Press.

  Osborne, M. and Rubinstein, A. (1994): *A Course in Game Theory*, MIT Press.

4.1.4 Game Theory II: EC104

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective is to discuss selected topics in game theory in some depth. These can vary across different years, depending upon the instructor's choice. They may include, but are not restricted to, the topics listed below.

- **Course Learning Outcomes**

  It is evident that there is overlap between the listed topics. So, for instance, if mechanism design is taught, its unifying framework can be used to study auctions, matching and so forth as well. The student is expected to learn individual topics in some depth, as well as learn some of their interconnections, as in the illustration above.

- **Content: Unit-wise**

  1. Auction Theory and Applications.
  2. Bargaining Theory and Applications.
  3. Matching Theory and Applications.
  4. Mechanism Design and Applications.
  5. Repeated Games and Applications.
  6. Global Games and Applications.
  7. Evolutionary Game Theory.
  8. Epistemic Game Theory.

- **Suggested Readings**

  Relevant papers will be an important part of the references in any given year. In addition, the following books and materials are good sources.

  Battigalli, P. (2018): *Analysis of Strategic Thinking-Part I*, didattica.unibocconi.edu

  Borgers, T. (2015): *An Introduction to the Theory of Mechanism Design*, Oxford University Press.

  Krishna, V. (2009): *Auction Theory*, Elsevier-Academic Press.

  Mailath, G. and Samuelson, L. (2006): *Repeated Games and Reputations*, Oxford University Press.

  Milgrom, P. (2017): *Discovering Prices: Auction Design in Markets with Complex Constraints*, Cambridge University Press.

  Morris, S. and Shin, H. (2003): Global games: theory and applications, in: *Advances in Economics and Econometrics (Eighth World Congress of the Econometric Society*, Cambridge University Press.

  Muthoo, A. (1999): *Bargaining Theory with Applications*, Cambridge University Press.

  Roth, A. and Sotomayor, M. (1990): *Two-sided Matching*, Cambridge University Press.

  Sandholm, W. (2010): *Population Games and Evolutionary Dynamics*, MIT Press.

  Vulkan, N.; Roth, A. and Neeman, Z.(2013): *The Handbook of Market Design*, Oxford University Press

4.1.5 Social Choice Theory: EC105

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  Social choice theory studies group decisions that are achieved by aggregating individual preferences. Aggregations may be guided by notions of justice, fairness and efficiency, which are also subjects of political philosophy, making this topic inherently interdisciplinary. The subject has evolved in economics by the systematic modelling of individual preferences and axiomatic structures, and more recently by using Game theory to provide a framework for considering strategic interactions and information revelation in this context. The goal of this course is to introduce students to basics of social choice theory and mechanism design.

- **Course Learning Outcomes**

  The student will learn a set of formal tools with which to analyze economic and social outcomes, as well as ongoing work on mechanism design or design of institutions to implement social choice functions.

- **Content: Unit-wise**

  1. Preference aggregation:
     Arrow's impossibility theorem; Welfare functional; Utilitarianism; Liberal paradox.
  2. Fairness:
     Rawlsian justice; Capability; Equality of opportunity; Envy freeness.
  3. Axiomatic bargaining, Axiomatic cost/surplus allocations, Matching.
  4. Measures:
     Inequality; Poverty; Mobility; Vulnerability.
  5. Mechanism design:
     Strategy proof mechanism, Nash and Bayes-Nash implementation, Auction, Regulation.

- **Suggested Readings**

  Krishna, V. (2009): *Auction Theory*, Elsevier.

  Mas-Colell, A.; Whinston, M. and Green, J. (1995): *Microeconomic Theory*, Oxford University Press.

  Moulin, H. (2004): *Fair Division and Collective Welfare*, MIT Press.

  Sen, A. (1999): *Choice, Welfare and Measurement*, Harvard University Press.

4.1.6 Topics in Economic Theory: EC106

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective is to discuss topics of significance in economic theory at some length. The topics will vary over different years and depend on the instructor's choice, who may choose them from any of a variety of fields, ranging from Micro to Macro.

- **Course Learning Outcomes**

  As a salient illustration, dynamic economics plays a significant role across a wide spectrum of Micro- and Macro- theory. A possible outline for such a course is given below. By the end of the course, students would learn the economics and mathematics of recursive models, modeling individual intertemporal choice, as well as repeated games with exponential discounting, and some of their many economic applications. They would also learn the problems and pitfalls when one models hyperbolic discounting.

- **Content : Unit-wise**

  1. Metric spaces. Contraction mapping theorem. Correspondences. Theorem of the maximum. Blackwell's conditions for a contraction. Dynamic programming and applications from job search, theory of investment, growth.

  2. Repeated games with perfect and imperfect monitoring. Applications to repeated moral hazard (and adverse selection): e.g., collusive repeated oligopoly, relational labour contracts.

  3. Behavioural models of time discounting and applications: Time inconsistency. Hyperbolic discounting model. Dual-self model.

     Applications: consumption-saving choices. Behavioural industrial organisation applications.

- **Suggested Readings**

  Besides papers, the following readings are suggested.

  Dhami, S. (2016): *The Foundations of Behavioural Economic Analysis*, Oxford University Press.

  Mailath, G. and Samuelson, L. (2006): *Repeated Games and Reputations*, Oxford University Press

  Stokey, N.; Lucas, R. and Prescott, E. (1989): *Recursive Methods in Economic Dynamics*, Harvard University Press.

4.1.7 International Trade Theory: EC107

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course is designed to make familiarise students with discussions in the area of international trade and trade policy, reviewing traditional theories of international trade and recent developments in the economic literature based on the New trade theory and on the analysis of FDI and global production chains.

- **Course Learning Outcomes**

  The student will be able to analyze historical as well as contemporary issues in trade theory and policy using a variety of lenses provided in the course: classical theories of comparative advantage, imperfect competition, political economy of trade agreements and protectionism. The analytical tools relating to the issues of migration, trade and capital formation will be updated.

- **Content : Unit-wise**

  1. Classical trade theories on comparative advantage (Ricardo and Heckscher-Ohlin frameworks), gains from trade, international equilibrium with continuum

  2. Specific factor models, empirical approaches, HOV and paradox

  3. Trade in intermediate inputs and wages: outsourcing, trade in tasks and sub-modularity

  4. Imperfect Competition:
     Imperfect competition, homogeneity: Krugman, Brander-Spencer models
     Monopolistic competition, heterogeneity
     Generalised oligopoly framework, heterogeneity

  5. FDI and global production, FDI vs. exports

  6. Political economy of trade agreements and upcoming issues of protections

  7. Trade and growth; immiserizing growth; endogenous growth with homogeneity and heterogeneity

  8. Migration, international trade and capital formation

- **Suggested Readings**

  Antras, P. (2016): *Global Production: Firms, Contracts, and Trade Structure*, Princeton University Press

  Dornbusch, R.; Fischer, S. and Samuelson, P. (1977): Comparative advantage, trade, and payments in a Ricardian model with a continuum of goods, *American Economic Review* 67, 823-39

Dornbusch, R.; Fischer, S. and Samuelson P. (1980): Heckscher-Ohlin trade theory with a continuum of goods, *The Quarterly Journal of Economics* 95, 203-224.

Feenstra, R. (2015): *Advanced International Trade: Theory and Evidence*, Princeton University Press.

Feenstra, R. (2010): Measuring the gains from trade under monopolistic competition, *Canadian Journal of Economics*, 1-28.

Feenstra, R. (2016): Gains from trade under monopolistic competition, *Pacific Economic Review* 21.

Felbermayr, G.; Grossmann, V. and Kohler, W. (2015): Migration, international trade, and capital formation: Cause or effect?, in R. Barry, Chiswick, P. Miller (eds.), *Handbook of the Economics of International Migration*, North Holland.

Freund, C. and Ozden, C. (2008): Trade policy and loss aversion, *American Economic Review* 98, 1675-1691

Gopinath, G.; Helpman, E. and Rogoff, K. (2014) (eds.): *Handbook of International Economics, Vol. 4*, Elsevier

Limao, N. and Tovar, P. (2011): Policy choice: Theory and evidence from commitment *via* international trade agreements, *Journal of International Economics* 85, 186-205.

4.2 Macroeconomics

4.2.1 Dynamic Macroeconomics: EC201

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  Dynamic models and approaches to policy making are integral to modern macroeconomics. This course emphasizes the use of recursive methods to analyze macroeconomic models. Applications involve building on the models introduced in compulsory macro, such as deterministic and stochastic growth and OLG models, as well as search models and dynamic public finance.

- **Course Learning Outcomes**

  This course will enable students to understand and apply dynamic programming methods to analyze macroeconomic problems and policy.

- **Content: Unit-wise**

1. Competitive Equilibria in Dynamic Economies:

   Stochastic difference equations; Markov processes; Dynamic Programming, Complete Markets; sequential trading and Arrow securities; Recursive competitive equilibrium; examples of incomplete markets.

2. Optimal Fiscal Policy

3. Optimal Taxation with and without commitment

4. Search, Matching and Unemployment

   McCall's model of intertemporal job search, A lake model, A model of career choice, Jovanovic's matching model

5. The savings problem and Bewley models

- **Suggested Readings**

  Ljungqvist, L. and T. Sargent: *Recursive Macroeconomic Theory*, Fourth Edition, MIT Press, 2018.

  Adda, J. and R. Cooper: *Dynamic Economics: Quantitative Methods and Applications*, MIT Press, 2003.

  Farhi, E., C. Sleet, et al. (2012): "Non-linear Capital Taxation without Commitment." *Review of Economic Studies* .

  Taylor, John B. and Uhlig, Harald (2016): *Handbook of Macroeconomics*, North-Holand: Elsevier

4.2.2   Computational Macroeconomics: EC202

- **Marks**: Assignments - 50, Exam - 50

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective is to teach the analytical and numerical tools for solving dynamic macroeconomics models. This includes relevant software (Matlab, Dynare).

- **Course Learning Outcomes**

  The student will understand recursive methods to express dynamic macro models, as well as gain facility in solving them numerically using Dynare (a software package written on Matlab). In particular, they will learn the formulation and solution of DSGE models, and their Bayesian estimation.

- Content: Unit-wise

  1. Introduction of coding the dynamical Systems: Deterministic and stochastic difference equations, Markov Process, Ergodic Theory, basic programming with Dynare.

2. Dynamic Optimisation: Markov Decision Process Model, Finite-Horizon Dynamic Programming, Infinite-Horizon Dynamic Programming, Applications, hands-on exercise in dynare, Linear-Quadratic Models, Control under Partial Information, Numerical Methods.

3. Application of RBC and New Keynesian models and simulation, and Bayesian Estimation of DSGE Models Using Dynare.

4. Application of standard New Keynesian in open economy with informal sector

5. Estimating non-linear models with states and with filtering states

6. Dynamic programming and projection methods

7. Heterogeneous models and estimations
   Aiyari model and Krusell-Smith models and their extensions.

- **Suggested Readings**

  Judd, Kenneth L., 1998, Numerical Methods in Economics, Cambridge: MIT Press.

  Hommes, Cars and LeBaron, Blake (2018), Handbook of Computational Economics, Vol 4, Elsevier.

  Miao, Jianjun (2013), Economics Dynamics: A Discrete Time, Boston University.

4.2.3   International Macroeconomics: EC203

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives** The course is aimed at providing students with a comprehensive knowledge of modern macroeconomic theory in a way that develops intuition and technical ability to apply macroeconomic theory in practice in an open economy environment. This is the study of how trade between countries in goods, services, and assets changes over time, both over the business cycle and the long run. The course offers important concepts, empirical facts, and puzzles in international macro and builds models to make sense of them (or not, in some cases!) Students will be equipped with the key tools needed to formulate and solve problems analytically and provided with an appreciation of how these tools can be used to understand real world events and policy.

- **Course Learning Outcomes**

  On successful completion of this course, students will be able to:

  (a) Recognise key concepts, theories and models of macroeconomics in open economy environment

  (b) Apply macroeconomic tools to the analysis of a variety of real world events, empirical trends and policy.

  (c) Communicate concepts, graphically, mathematically and in writing, to a professional standard.

(d) Evaluate real world events and illustrate their arguments in terms of relevant macroeconomic models.

- **Content: Unit-wise**

    1. Preliminaries and basic models:

        Business-Cycle Facts Around the World, Global imbalances and balances of payment accounting; An Open Endowment Economy; An Open Economy with Capital; The Open Economy Real-Business-Cycle Model.

    2. Standard New Keynesian model with open economy

    3. Business Cycles, Trade, Exchange Rates and Unemployment:

        Business Cycles in Emerging Countries: Productivity Shocks Versus Financial Frictions; Interest-Rate Shocks; Importable Goods, Exportable Goods and the Terms of Trade; Nontradable Goods and The Real Exchange Rate; Nominal Rigidity, Exchange Rates and Unemployment.

    4. Policy:

        Exchange Rate Policy And Capital Controls; Financial Frictions And Aggregate Instability.

    5. Sovereign debt, default and crises:

        Sovereign Default; Government debt in international macroeconomics; sovereign debt crises; International capital flow puzzles.

    6. Modeling joint dynamics of the current account and the real exchange rate under currency paradigms

- **Suggested Readings**

    Gopinath, G.; Helpman, E. and Rogoff, K. (2014)(ed): *Handbook of International Economics*, Vol. 4. Amsterdam: Elsevier.

    Schmitt-Grohe, S.; Uribe, M. and Woodford, M. (2016): *International Macroeconomics*, Princeton University Press.

    Uribe, M. and Schmitt-Grohe, S. (2017): *Open Economy Macroeconomics*, Princeton University Press.

4.2.4 Monetary Theory and Policy: EC204

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

    This course aims to acquaint the students with the role played by monetary policy and the impact of introducing money in standard economic theory models. The course covers money-in-the-utility function model and the New Keynesian model of monetary

policy. The course also includes a discussion on the role played by monetary policy in the open economy context. The course also delves on discretionary policy vs rules and monetary policy strategies.

- **Course Learning Outcomes**

  On successful completion of this course, students will be able to:

  1. Understand monetary models
  2. Analyse transmission mechanism of monetary policy
  3. Comprehend and analyse the impact of monetary policy on the economy
  4. Compare impact of monetary rules vs discretionary policy
  5. Understand monetary policy strategies

- **Content: Unit-wise**

  1. Money-in-the-Utility Function

     MIU model; steady state equilibrium; Nonsuperneutrality; Dynamics.
  2. New Keynesian Models of Monetary Policy

     Basic New Keynesian model; Monetary policy analysis in the New Keynesian model
  3. Monetary Policy in an Open Economy

     Two-country model; Policy coordination; Small open economy models
  4. Discretionary Policy and Rules

     Policy Objectives; Targeting rules; Taylor Principle; Inflation Targeting framework; Commitment vs. Discretion
  5. Monetary Policy Operating Procedures

     Instruments and goals; Effects of operating procedures; policy measures; Role and strategies of Central Bank communication in Monetary Policy; Forward guidance; Unconventional monetary policy

- **Suggested Readings**

  Gali, J. (2015): *Monetary Policy, Inflation, and the Business Cycle*, Princeton University Press.

  Walsh, C. (2017): *Monetary Theory and Policy*, 4th Edition, MIT Press

  Woodford, M. (2003): *Interest and Prices: Foundations of a Theory of Monetary Policy*, Princeton University Press

  Bianchi, F., and Melosi, L.(2018): "Constrained Discretion and Central Bank Transparency", *Review of Economics and Statistics*, 100 (1), 187-202.

  Hansen, S., McMahon, M., and Tong, M.(2019): "The Long-run Information Effect of Central Bank Communication", CEPR Discussion Paper 13438.

4.2.5   Macroeconomics of Development: EC205

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The course is motivated by two fundamental queries: (i) What explains the vast divergence in growth patterns across the world? (ii) What is an appropriate government policy (if any) in a low income-low growth country which can usher in a "high growth" regime? Modern growth theory has moved beyond the neoclassical framework to provide answers to these set of questions. This course takes a closer look at these alternative theories.

- **Course Learning Outcomes**

  This course will enable students to understand, evaluate and compare various policies that promote growth. It will also help them understand the deeper institutional and cultural characteristics that might be the root cause of underdevelopment in many poor countries.

- **Content: Unit-wise**

  1. Proximate Causes of Growth:

     (a) Human Capital: The Ben Porath model of human capital accumulation; The Nelson-Phelps model of skill-technology complementarity.

     (b) Technology: Distance to the frontier and technology diffusion; Directed technological change; Appropriate versus inappropriate technologies.

  2. Deeper Causes of Growth:

     (a) Imperfect Markets: Credit Market Imperfection and Indivisibility of investment; Risk, diversification and financial institutions.

     (b) Political Economy: Inequality, Taxation and Growth; Democracy versus Oligarchy.

     (c) History versus Expectations: Underdevelopment as coordination failure; Multiple equilibria in technology adoption.

     (d) Culture: Culture, risk and entrepreneurship; Culture, patience and occupational choice.

- **Suggested Readings**

  This course is primarily based on journal articles too numerous to list here. A broad overview of the topics can be found in the following text books:

  Acemoglu, D. (2009): *Introduction to Modern Economic Growth*, Princeton University Press

  Aghion, P. and Howitt, P. (2009): *The Economics of Growth*, MIT Press

  A few representative articles are listed:

Acemoglu, Daron (2002): "Directed Technical Change." Review of Economic Studies 69: 781–809.

Acemoglu, Daron, and Zilibotti, Fabrizio (1997) "Was Prometheus Unbound by Chance? Risk, Diversification and Growth." Journal of Political Economy 105: 709–751.

Adsera, Alicia and Ray, Debraj (1998) "History and Coordination Failure", Journal of Economic Growth 3(3) 267–276.

Alesina, Alberto, and Rodrik, Dani (1994) "Distributive Politics and Economic Growth." Quarterly Journal of Economics 109: 465–490.

Ben-Porath, Yoram (1967) "The Production of Human Capital and the Life Cycle of Earnings." Journal of Political Economy 75: 352–365.

Doepke, Matthias and Zilibotti, Fabrizio (2008), "Occupational Choice and the Spirit of Capitalism", The Quarterly Journal of Economics, 123 (2), 747–793.

Galor, Oded and Zeira, Joseph (1993), "Income Distribution and Macroeconomics." Review of Economic Studies 60: 35–52.

Greenwood, Jeremy and Smith, Bruce (1997), "Financial markets in development, and the development of financial markets", *Journal of Economic Dynamics and Control*, 1997, 21(1), 145-181

Nelson, Richard R.,and Edmund S. Phelps (1966): "Investment in Humans, Technological Diffusion,and Economic Growth." American Economic Review 56: 69–75.

4.3   Economic History/History of Economic Thought

4.3.1   Contemporary Issues in Historical Perspective: EC301

Marks: Assignments - 30, Exam - 70

Duration (per week): 5 hours.

Credits : 5.

- **Course Objectives**: This course aims to connect contemporary issues in economics with their historical counterparts to better understand the evolution of ideas and the empirical patterns that accompany them. Many of the questions that are the centre of charged and polarized discussions today have interesting histories whose reading can provide sharpness and context to current debates. Each year, a few of these issues will be selected. The readings given below are therefore indicative. They are an example of what will be used for two broad topics: Environmental Change and Group Inequality.

- **Course Learning Outcomes:** The class will be a mixture of lectures and seminar-type discussions based on assigned material that is read before coming to class. Students will learn how to combine historical argument with the tools of modern microeconomic analysis.

- **Content: Unit-wise**

    1. Historical facts about our changing environment:

        Trends in population, GDP, energy use and pollution. Milestones in environmental regulation since the early twentieth century.

    2. The commons problem:

        Community institutions and collective action.

    3. Environmental regulation:

        Types of international agreements that have emerged to avoid environmental degradation. Game-theoretic analysis of the stability of such agreements. Price versus quantity regulation.

    4. Discrimination:

        Evidence on the practice of discrimination, correspondence studies, Models of statistical and preference-based discrimination. Segregation.

    5. Social policy to address group inequalities:

        Affirmative action in historical and cross-national perspective.

- **Suggested Readings**

    Adida,Claire; Laitin, David D. and Valfort, Marie-Anne (2010): "Identifying barriers to Muslim integration in France." PNAS 107(52), 22384-22390.

    Dirks, Nicholas (2001): *Castes of Mind: Colonialism and the making of modern India*, Princeton University Press .

    Barrett, Scott (2006): *Environment and statecraft: the strategy of environmental treaty-making.* Oxford University Press

    Guha, Ramachandra (2001): *The unquiet woods: ecological change and peasant resistance in the Himalaya.*

    Henderson, Vernon J. (1996) "Effects of air quality qegulation." *The American Economic Review* pp. 789-813.

    McNeil, J.R. (2000): *Something new under the sun: An environmental history of the twentieth- century world.* W.W. Norton.

    Ostrom, Elinor (2010): *Governing the commons: The evolution of institutions for collective action.* Cambridge University Press.

    Loury, Glenn C. (2002): *The anatomy of racial inequality.* Harvard University Press.

    Galanter, Mark (2004): "Competing equalities: law and the backward classes in India," University of California Press

    Weisskopf, Thomas E.(2004): *Affirmative action in the United States and India: a comparative perspective.* Routledge

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4.3.2 Topics in Economic and Social History: EC302

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course critically examines the mainstream characterisation of global migration flows. After discussing the impulses that led to the massive movement of people across continents in the 19th century, the course focuses attention on plantations, a sector that was one of the largest employers of migrant labour.

- **Course Learning Outcomes** The student will understand the diverse recruitment strategies used on the plantations in this period, and also, in depth, the causes and consequences of the variety of labour contracts (including indenture) under which workers were employed. Additionally, they will develop an understanding of gender dimensions of migration and work are discussed in a separate sub-section.

- **Content : Unit-wise**

  1. Global migration flows in the 19th century

  2. Plantations in the colonies: indentured labour

  3. Other types of labour contracts

  4. Women workers in the 19th century

  5. Role of plantations in the colonial economy

- **Suggested Readings** Breman, J. (1990): *Taming the Coolie Beast: Plantation Society and the Colonial Order in Southeast Asia*, Oxford University Press.

  Carter, M. (1994): Lakshmi's legacy: the testimonies of Indian women in 19th century Mauritius, *Editions de l'océan Indien*

  Carter, M. (1996): *Voice from Indenture: Experiences of Indian Migrants in the British Empire*, Leicester University Press

  Lal, B. (1983): Girmitiyas: the origins of the Fiji Indians, *Journal of Pacific History*

  Mintz, S. (1985): *Sweetness and Power: The Place of Sugar in Modern History*, Penguin

  Tinker, H. (2001): *A New System of Slavery: The export of Indian labour overseas 1830-1920*, Hansib Educational Books

4.3.3   History of Economic Analysis: EC303

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

  Credits : 5

  Course Objectives: This course traces the development of the ideas that have led to the methods of economic analysis that are considered best practice in the discipline. It will also expose students to non-mainstream paradigms that have emerged in the discipline.

- **Course Learning Outcomes:** Students will follow the evolution of the techniques they are taught in many of their compulsory courses. This will help them critically evaluate economic techniques and link them to the challenges of economic environment that led to their emergence.

- **Content: Unit-wise**

  1. Classical political economy:
     The development and growth of nations and the distribution of income across the owners of labour, capital and land.
  2. Neoclassical microeconomics:
     Demand theory, welfare economics and general equilibrium analysis.
  3. Information economics and game theory:
     The effects of missing information and strategic behaviour on the functioning of markets.
  4. Macroeconomics and financial markets:
     Origins of macroeconomics in the Great Depression and its subsequent development.
  5. The development of empirical methods:
     Statistical thinking and causal inference in economics.
  6. Endogenous preferences and behavioral economics:
     The move beyond traditional notions of preferences and maximizing behavior.

- **Selected Readings**

  J. Angrist and J. S. Pischke (2010): "The credibility revolution in empirical economics: How better research design is taking the con out of econometrics", *Journal of Economic Perspectives*, 24(2): 3-30.

  Blaug, M. (1987): *Economic Theory in Retrospect.* Cambridge, Cambridge University Press (1987).

  Bowles, S.: *Microeconomics: Behavior, Institutions, Evolution.* New Delhi, Oxford University Press (2004).

  Galbraith, J.: *The Affluent Society.* Boston, Houghton Mifflin (1958).

R. L. Heilbroner: *The Worldly Philosophers.* New York, Simon & Schuster (1986).

J. R. Hicks (1946). *Value and Capital.*

J. M. Keynes (1936). *The general theory of employment, interest and money.*

Krugman, P.: *The return of depression economics and the crisis of 2008.* WW Norton & Company (2009).

Mankiw, N. (1990): "A Quick Refresher Course in Macroeconomics." *Journal of Economic Literature*, 28(4): 1645-1660.

O. Rogeberg and H. O. Melberg (2011). "Acceptance of unsupported claims about reality: a blind spot in economics." *Journal of Economic Methodology*, 18(01): 29-52.

N. Scheiber (2007). "Freaks and geeks: How freakonomics is ruining the dismal science." *The New Republic*, 2: 27-31.

T. Scitovsky (1986). *Human Desire and Economic Satisfaction.* New York, Wheatsheaf.

Shleifer, A. (2000). *Inefficient markets: an introduction to behavioral finance.* Oxford University Press.

A. Smith. (1776). *An Inquiry Into the Nature and Causes of the Wealth of Nations.*

J. E. Stiglitz. *Whither Socialism?* Cambridge, Massachusetts, MIT Press.

4.4 Econometric Methods and Applications

4.4.1 Econometric Methods: EC401

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course provides the theoretical underpinnings for conducting applied econometric studies. It provides the conceptual framework on which such analyses are based, supplemented by illustrative empirical applications. Students will need to have passed course 003 in order to be eligible to take this course.

- **Course Learning Outcomes**

  The ability to conduct empirical analyses and data analytics are increasingly valued in the job market. This course will enable students to understand why and how questions are to be framed and answered. It will also equip them to learn more advanced topics on their own.

- **Content: Unit-wise**

1. Ordinary Least Squares, Hypothesis Tests and Model Selection.

2. Nonlinear, Semiparametric and Nonparametric Regression Models.

3. Endogeneity and Instrumental Variable Estimation.

4. Systems of Equations and Panel Data.

5. Simulation Based Inference.

6. Discrete Choice Models, Truncation and Censoring.

7. Special topic (will vary each year)

- **Suggested Readings**

Greene, William H. (2018): Econometric Analysis, Pearson India Education Services.
Supplementary material for empirical applications will also be provided.

4.4.2 Impact Evaluation Methods: EC402

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective of this course is to introduce students to techniques used to evaluate the impact of programmes and policies on design outcomes. It will underline the need for context-specificity, but in each case, the focus will be on uncovering causal impact. It will review various techniques used to achieve identification, and discuss their limitations. It will use examples from India and overseas to anchor discussion of each of these methods.

- **Course Learning Outcomes**

  Impact assessment tools are being increasingly used in public, private and NGO sectors to evaluate which interventions and programmes work, and how cost-effective they are. This course will therefore be of benefit to students in a wide range of careers.

- **Content: Unit-wise**

  1. Randomized Control Trials

  2. Control Function Approaches

  3. Matching Methods

  4. Regression Discontinuity

  5. Mixed Methods

- **Suggested Readings**

  Rosenbaum, P. (2017): *Observation and Experiment: An Introduction to Causal Inference*, Harvard University Press

Morgan, S. and Winship, C. (2010): *Counterfactuals and Causal Inference: Methods and Principles for Social Science Research.* Cambridge University Press

J. Angrist, J-S Pischke: *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press (2014)

S. Athey, G. Imbens (2016): The State of Applied Econometrics: Causality and Policy Evaluation.

4.4.3 Time Series Analysis: EC403

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

This course familiarizes students with advanced modelling techniques using time series data. The course primarily focuses on acquainting students with technical skills along with implementation of time series models using software. Students can apply time series econometrics to a wide variety of macro and financial data problems.

- **Course Learning Outcomes**

On successful completion of this course, students will be able to: (a) Relate to the key concepts in time series econometrics. (b) Apply time series methods to analyse various situations using time series econometrics software. (c) Evaluate real world problems by formulating and utilizing the appropriate time series models.

- **Content: Unit-wise**

    1. Unit Roots, Cointegration and ARDL:
       Deterministic and stochastic trend, trend stationary and difference stationary process; Random walk model; Testing for unit roots, structural change, multiple unit roots, seasonal unit roots; Cointegration, error correction; Testing for cointegration; ARDL Bounds Testing Approach.

    2. Box-Jenkins Methodology:
       Stationarity, invertibility; Autoregressive models, moving average models, mixed autoregressive and moving average models; Identification, estimation, diagnostic checking; Forecast function.

    3. ARCH/GARCH:
       ARCH Processes; GARCH Processes; ARCH-M and GARCH-M Models.

    4. VAR Models:
       Estimation and identification; Impulse response function; Variance decomposition.

    5. Panel Data Methods:
       Panel Data Unit Root Tests; Panel Data Cointegration Test; Panel Estimation (FMOLS and DOLS).

- **Suggested Readings**

  Box, G.; Jenkins,G.M. and Reinsel, G.C. (2008): *Time Series Analysis: Forecasting and Control*, 4th Edition, John Wiley

  Enders, W. (2015): *Applied Econometric Time Series*, 4th Edition, John Wiley.

  Greene, W. (2018): *Econometric Analysis*, 8th Edition, Pearson.

  Pesaran, M. H. (2015): *Time Series and Panel Data Econometrics*, Oxford University Press.

  Pindyck, R. and Rubinfeld, D. (2000): *Econometric Models and Economic Forecasts*, Fourth Edition, McGraw-Hill.

  Rao, B. Bhaskara (2007): *Cointegration for the Applied Economist*, 2nd Edition, Palgrave Macmillan.

  Tsay, R.(2010): *Analysis of Financial Time Series*, Third Edition, Wiley.

4.4.4   Forecasting Methods and Applications: EC404

- **Marks**: Assignments - 50, Exam - 50

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course covers various quantitative and judgmental techniques used in economic and business forecasting. The course also examines techniques for the evaluation of performance of forecasting methods and combination of forecasts. Practical applications of forecasting using forecasting/econometric software packages are undertaken.

- **Course Learning Outcomes**

  On successful completion of this course, students will be able to:

  1. Understand qualitative and quantitative methods for forecasting in business and economics
  2. Apply time series econometric forecasting methods to practical forecasting settings
  3. Use standard econometric/forecasting software for forecasting
  4. Work on real world forecasting applications

- **Content : Unit-wise**

  1. Overview of Forecasting and Forecast Evaluation

     Applications of forecasting; Forecasting methods and forecast horizons; Nowcasting and backcasting; Measures and tests of accuracy; Choosing between forecasting methods; Unbiasedness and Rationality

2. Combination of Forecasts

   Forecast Encompassing; Optimal combining weights

3. Univariate Models: Smoothing Techniques and Box-Jenkins Methodology

   Averaging methods; Exponential smoothing methods; Decomposition methods; Unit roots; Autoregressive models, moving average models, mixed autoregressive and moving average models; Identification, estimation, diagnostic checking; Forecast function

4. Multivariate Models: Regression Models, Simultaneous Equations Models, VAR models

   Multivariate regression model; Implications of violation of OLS assumptions for forecasting; Observational Equivalence, reduced form representation; Estimation, forecasting and simulation with simultaneous equation model; VAR models; Cointegration

5. Judgmental Forecasting

   Jury of executive opinion; Delphi approach; Sales force composite methods; Anticipatory surveys and market research-based assessments

- **Suggested Readings**

Box, G.E.P., G.M. Jenkins, and G.C. Reinsel (2008), Time Series Analysis: Forecasting and Control, 4th Edition, John Wiley & Sons Inc.

Brooks, C. (2019): *Introductory Econometrics for Finance*, 4th Edition, Cambridge University Press.

Diebold, F.X. (2006): Elements of Forecasting, 4th Edition, South-Western Publishers.

Diebold, F.X. (2017): *Forecasting: Economics, Business, Finance and Beyond.*
https://www.sas.upenn.edu/ fdiebold/Teaching221/Forecasting.pdf

Delurgio, S.A. (1998): *Forecasting Principles and Applications*, McGraw-Hill Publishers.

Enders, W. (2015): *Applied Econometric Time Series*, 4th Edition, John Wiley & Sons, Inc.

Hanke, J.E. and D. Wichern (2008): *Business Forecasting*, 9th Edition, Pearson Publishing.

Makridakis, S.G.; Wheelwright, S.C. and Hyndman, R.J. (1998): *Forecasting: Methods and Applications*, 3rd Edition, John Wiley & Sons, Inc.

Newbold, P. and Bos, T. (1994): *Introductory Business & Economic Forecasting*, 2nd Edition, South-Western Publishers.

Pesaran, M.H. (2015): *Time Series and Panel Data Econometrics*, Oxford University Press.

Pindyck, R.S. and Rubinfeld, D.L. (1997): *Econometric Models and Economic Forecasts*, Fourth Edition, McGraw-Hill.

4.4.5   Applied Production Analysis: EC405

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This is an applied course intended to equip students with relevant skills and competences to analyse production technologies and producer behaviour with appropriate applied methods/tools.

- **Course Learning Outcomes**

  The student will develop a thorough understanding of production theories, estimation techniques for efficiency and productivity measurement.

- **Content : Unit-wise**

  1. Primal approaches in production economics: theory and econometric estimation
  2. Dual approaches in production economics - cost minimization and cost function, profit maximization and profit function: theory and econometric estimation
  3. Multi-output technologies and their estimation: input, output and directional distance functions
  4. Functional forms used in applied production analysis: Cobb-Douglas, translog, quadratic etc. Unit V: Efficiency and Productivity Analysis: concepts and measurements (stochastic frontier analysis (SFA), DEA etc.)

- **Suggested Readings**

  Chambers, R.(1988): *Applied Production Analysis: A Dual Approach*, Cambridge University Press

  Färe, R.; Grosskopf, S. and Primont, D. (2007): *Aggregation, Efficiency and Measurement*, Springer.

  Färe, R. and Primont, D. (1995): *Multi-Output Production and Duality: Theory and Applications*, Kluwer Academic Publishers.

  Grifell-Tatjé, E.; Lovel, C. Knox and Sickles, R. (2018): *The Oxford Handbook of Productivity Analysis*, Oxford University Press.

  Kumbhakar, S.; Wang, H.-J. and Horncastle, A.(2014): *A Practitioner's Guide to Stochastic Frontier Analysis*, Cambridge University Press.

  Moreover, readings in the form of journal articles and working papers

4.4.6 Applied Consumption Analysis: EC406

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective of this course is to familiarize students with analyzing issues related to consumer demand using appropriate econometric tools.

- **Course Learning Outcomes**

  The student will learn how to analyze demographically-extended demand systems, as well as dynamic demand systems, using maximum likelihood, and nonparametric estimation techniques.

- **Content: Unit-wise**

  1. Review of Theory: Duality and Separability Concepts, Theoretical Restrictions.
  2. Single-equation approaches: Engel functions, Demand for durable goods.
  3. System Estimation: Functional forms, Estimation procedures, Assumption about error structures, Testing.
  4. Dynamic Demand Systems: Habit formation models, Modelling changes in taste.
  5. Demographically-Extended Demand Systems: Translation, Scaling approaches.
  6. Non-parametric (Regression) Approaches. Applications of Demand Analysis: Food and Nutrition; Demand for non-marketed goods; Welfare applications.

- **Suggested Readings**

  Deaton, A. and Muellbauer, J. (1980), *Economics and Consumer Behaviour*, Cambridge University Press.

  Deaton, A. (1997): Analysis of Household Surveys: A Microeconometric Approach to Development Policy, The John Hopkins University Press.

  Hardle, W. (1992): Applied Nonparametric Regression, Cambridge University Press.

  Pollak, R. and Wales, T. (1992), Demand System Specification and Estimation, Oxford University Press.

  Philips, L. (1983): *Applied Consumption Analysis*, North Holland.

4.4.7 Semi- and Nonparametric Estimation: EC407

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course is aimed at giving a brief introduction to the statistical theory of nonparametric density and regression function estimation. The focus is on kernel-based nonparametric estimation and inference. This includes nonparametric kernel density estimation, tests associated with densities, nonparametric kernel regression, tests for correct specification of functional forms, nonparametric sieve estimation, and semi-parametric estimation of single-equation models (including partially linear models, single-index models, additive models, etc.). Several statistical and econometric applications with cross-sectional data will be discussed. A brief discussion of nonparametric and semi-parametric estimation of panel data models will be touched upon.

- **Course Learning Outcomes**

  Students will acquire some understanding and skills in nonparametric estimation, an area that is increasingly important in today's data-rich contexts.

- **Content : Unit-wise**

  1. Parametric vs. nonparametric statistical models. The histogram and the kernel density estimator.
  2. Statistical properties of the kernel density estimator. Bias-variance tradeoff.
  3. Further statistical properties. Bandwidth choice in theory and practice. Kernel choice.
  4. Multivariate kernel density estimator. Curse of dimensionality.
  5. Some direct statistical applications of kernel density estimation.
  6. Nonparametric regression: kernel estimator (Nadaraya-Watson) and local linear regression estimator.
  7. Statistical properties of the Nadaraya-Watson and local linear regression estimator. Series estimation.
  8. Some direct applications of nonparametric regression.
  9. Application: estimating conditional average treatment effects.
  10. Application: estimating regression discontinuity models.
  11. Application: estimating sample selection models.

- **Suggested Readings**

  Abrevaya, J.; Hsu, Y.C. and Lieli, R.(2015): Estimating conditional average treatment effects, *Journal of Business and Economic Statistics* 33, 485-505.

  Calonico, S.; Cattaneo, M. and Titiunik, R.(2014): Robust nonparametric confidence intervals for regression discontinuity designs, *Econometrica* 82, 2295-2326

  Das, M.; Newey, W. and Vella, F. (2003): Nonparametric estimation of sample selection models, *Review of Economic Studies* 70, 33-58

  Pagan, A. and Ullah, A. :(1999) *Nonparametric Econometrics*, Cambridge University Press.

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Silverman, B. (1986): *Density Estimation for Statistics and Data Analysis*, Chapman and Hall.

Su, L. (2011): *A Brief Introduction to Nonparametric Econometrics*, Lecture notes, Singapore Management University.

4.4.8 Topics in Econometrics: EC408

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course is meant to acquaint students with some advanced techniques in econometric estimation.

- **Course Learning Outcomes**

  Students would become conversant with technical derivations and practical applications in the areas of microeconomics and macroeconomics.

- **Content: Unit-wise**

  1. Linear regression models:
     Instruments, 2SLS estimator, Generalized Instrumental Variables estimator; Simultaneous equations.
  2. Generalised Method of Moments estimator:
     Efficient GMM estimation; Over-identifying restrictions.
  3. Panel Data Models:
     Fixed effects models, Random effects models, Arellano-Bond estimator in dynamic panel data models.
  4. Quantile regression estimation.
  5. Nonlinear Models:
     probit models, logit models (including their multivariate forms), Tobit models, models for count data, censored and missing data schemes.

- **Suggested Readings**

  Wooldridge, Jeffrey M.(2010): *Econometric Analysis of Cross Section and Panel Data*, Second Edition, MIT Press.

4.4.9 Applied Environmental Analysis: EC409

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course focuses on empirical applications in environmental and natural resource economics. It comprises applied optimal control and dynamic optimization problems; computable general equilibrium (CGE) models; and applied econometrics?cross section, panel data (static, dynamic and non-linear models) and discrete choice (limited dependent variable) models.

- **Course Learning Outcomes**

  The emphasis is on understanding tools and techniques and applying them in a hands-on manner with environmental and natural issues as the context.

- **Content : Unit-wise**

  1. Non-market valuation techniques: revealed and stated preferences.
  2. Quasi-experimental methods in environmental economics
  3. Environmental valuation at firm level: environment as an input in production; multi-output production technologies; emission generating production technologies.
  4. Environmental valuation at the macro level: reduced form and computable general equilibrium models.
  5. Environment and technological progress: econometric studies.
  6. Dynamic applications: renewable and non-renewable resources; stock pollutants.

- **Suggested Readings** J. Angrist, J.-S. Pischke: *Mastering Metrics: the Path from Cause to Effect*, Princeton University Press (2016)

  J. Conrad: *Resource Economics, 2nd ed.*, Cambridge University Press (2010)

  R. Färe, D. Primont: *Multi-output production and duality: theory and applications*, Kluwer (1995)

  D. Phaneuf, T. Rquate: *A Course in Environmental Economics: theory, policy and practice*, Cambridge University Press (2016)

  Moreover, readings in the form of journal articles and working papers.

4.4.10   Coding Basics with Economic Applications: EC410

- **Marks**: Assignments - 50, Exam - 50

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course will introduce the basics of writing code and applying it to economics. As designed, it will work with the Python programming language. It will begin with an

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introduction to data types in Python, basic techniques (iteration, defining functions, branching etc.), some of the Python libraries, and object-oriented programming. It will then introduce basic numerical methods (numerically solving nonlinear equations, optimisation, integration, Monte Carlo and simulation, numerical dynamic programming) and discuss their implementation in Python. The instructor will then have a choice of alternative modules. She can apply these techniques to relatively simple but modern macroeconomic models (Part 3 below), or industrial organisation models (Part 4). Or she can spend more time developing applications to probability and statistics (Part 5). If this last option is chosen, Part 2 of the course, on numerical methods, will have to be reduced and reorganised appropriately.

- **Course Learning Outcomes**

  The students will develop programming and computing skill on simulation and numerical dynamic programming

- **Content : Unit-wise**

  1. Coding in Python: Loops, Lists, Functions, Branching, Curve Plotting, Error Handling, Strings, basics of data handling and web scraping, object-oriented programming. Various Python libraries introduced alongside: Numpy, Scipy, Matplotlib, Pandas, BeautifulSoup, Regular Expressions.

  2. Numerical methods for solving nonlinear equations, fixed points, optimisation, integration, simulation, dynamic programming.

  3. Applications from macroeconomics: job search, stochastic optimal growth, rational expectations equilibrium, asset pricing.

  4. Applications from Industrial Organisation: Estimating demand in differentiated product static oligopoly, estimating single agent dynamic models.

  5. Applications from probability and statistics: generating random numbers and computing probabilities and distributions from first principles, Monte Carlo sampling methods, using the Scipy and Sympy statistics modules to illustrate types of convergence, estimation, confidence intervals, hypothesis testing, Bootstrapping, kernel density estimation, connections with machine learning using the Scikit-learn module.

- **Suggested Readings** V. Aguirregabiria: *Empirical Industrial Organization: Models, Methods and Applications*, Mimeo, University of Toronto (2012)

  J. Guttag: *Introduction to Computation and Programming Using Python*, MIT Press (2016)

  K. Judd: *Numerical Methods in Economics*, MIT Press (1998)

  H. Langtangen: *A Primer on Scientific Programming with Python*, Springer (2016)

  J. Rust: Numerical dynamic programming in economics, in: *The Handbook of Computational Economics*, North-Holland (1996)

  T. Sargent, J. Stachurski: *QuantEcon.lectures-python3*, https://quantecon.org (2018)

M. Shum: *Econometric Models for Industrial Organization*, World Scientific (2017)

A. Sweigart: *Automate the Boring Stuff with Python: Practical Programming for Total Beginners*, No Starch Press (2015)

J. Unpingco: *Python for Probability, Statistics and Machine Learning*, Springer (2016)

4.4.11 Environmental Econometrics: EC411

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course will provide students with practical applications of econometric and other quantitative techniques to environmental problems especially for developing countries. These techniques include, but are not limited to, panel data regression, semi-parametric and nonparametric estimation, experimental and quasi-experimental techniques, numerical computational methods and machine learning. Ideally, students in this course should have prior exposure to econometric methods and impact evaluation at the level of Courses EC401, EC 402. Any new technique introduced in this course will only be covered in a practical how-to manner. The emphasis in this course will not be on the techniques, per se, but on how they are applied to environment problems especially in developing countries. The pedagogy will be through hands-on learning and projects.

- **Course Learning Outcomes**

  1. Students will become aware of the limitations of conventional, associational studies and the need for more varied empirical techniques.

  2. They will acquire familiarity with policy-oriented research in the field of environment.

  3. They will get hands-on experience in applying these techniques using real-world datasets and statistical software.

- **Content: Unit-wise**

  1. Review of econometric and impact evaluation methods.
  2. Introduction to numerical computational methods, machine learning and Python.
  3. Applications of impact evaluation methods: Environmental policies and programs.
  4. Environmental applications of numerical computational methods and machine learning.
  5. Spatial Econometrics application in environmental and urban economics

- **Suggested Readings**

  Angrist, J. and Pischke, J-S.: *Mostly Harmless Econometrics: An Empiricist?s Companion*, Princeton University Press (2008).

Train, K.: *Discrete choice methods with simulation*, Cambridge University Press (2009).

Gibbons, S. and Overman, H. (2012): "Mostly Pointless Spatial Econometrics?", *Journal of Regional Science*, 52(2), 172-191.

Atak, A., Linton, O. and Xiao, Z.(2011): "A semiparametric panel model for unbalanced data with application to climate change in the United Kingdom", *Journal of Econometrics*, 164(1), 92-115.

Athey, S. (2018). "The impact of machine learning on economics", in *The Economics of Artificial Intelligence: An Agenda*. University of Chicago Press.

Athey, S. and Imbens, G. (2017): "The state of applied econometrics: causality and policy evaluation", *Journal of Economic Perspectives* 31, no. 2 (2017): 3-32.

Blanc, E. and Schlenker, W.(2017): "The use of panel models in assessments of climate impacts on agriculture", *Review of Environmental Economics and Policy*, 11(2):258-279.

Cai, Y. (2018): "Computational methods in environmental and resource economics", *Annual Review of Resource Economics*, 11.

Deschenes, O. and Meng, K. (2018): "Quasi-experimental methods in environmental economics: opportunities and challenges", NBER WP No. 24903.

Hsiang S. (2016): "Climate econometrics", *Annual Review of Resource Economics* 8:43-75.

Larsen, A., Meng, K. and Kendall, B. (2019): "Causal analysis in control?impact ecological studies with observational data", *Methods in Ecology and Evolution*, 10(7):924-934.

Olden, J., Lawler, J. and Poff, N. (2008): "Machine learning methods without tears: a primer for ecologists", *The Quarterly Review of Biology*, 83(2):171-193.

Other readings from journal articles and working papers.

4.5 Finance: Theory, Institutions and Modelling

4.5.1 Corporate Finance: EC501

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The course will mainly focus on the interaction of firms and financial markets, and corporate governance. The study of corporate finance focuses on how firms raise finance and structure their liabilities. In the presence of agency problems, raising finance is

fraught with moral hazard and adverse selection problems. The course will study different aspects of lender-borrower relationships and their market outcomes. Theoretical models will be taught to the students with the help of game theory and information economics. The course would have journal articles and some textbooks as readings.

- **Course Learning Outcomes**

  The students will be familiarised with the advanced theory and practices in corporate finance.

- **Course Content**

  1. Credit rationing
  2. Capital structure
  3. Capital acquisition and initial public offering
  4. Dividend policy
  5. Market for corporate control
  6. Takeovers and acquisitions
  7. Financial intermediation
  8. Corporate governance and corporate board

- **Suggested Readings**

  Amaro de Matos, J. (2001): *Theoretical Foundation of Corporate Finance*, Princeton University Press

  Freixas, X. and Rochet, J.C. (2008): *Microeconomics of Banking*, MIT Press

  Tirole, J. (2006): *The Theory of Corporate Finance*, Princeton University Press

4.5.2   Real Estate Economics and Finance: EC502

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits**: 5.

- **Course Objectives**

  This course is an introduction to the theoretical and practical functioning of urban real estate markets using concepts from urban economics, finance and real estate economics.

  Starting with the productive and consumption advantages of urban areas and location patterns within cities, we study the implications for demand and supply of residential and commercial real estate, and for real estate asset prices. Subsequently, the objective is to understand valuation techniques for real estate, financial leverage and portfolio considerations, and the impact of policy, particularly taxation and urban planning.

- **Course Learning Outcomes**

This course will be particularly relevant for students interested in understanding real estate related fields in the public or private sector; or for students who are considering further education in this field. The students will draw on theory to assess the impact of a shift in supply and demand on residential and commercial property markets.

- **Course Content: Unit-wise**

1. Real Estate values over space and time
2. Why do cities exist? Agglomeration economies and urban consumption
3. Monocentric City Model and spatial equilibrium City Systems, city size and prices
4. Real estate supply
5. Public policy and real estate
6. Real estate price measurement: median price, hedonic regression, repeat sales
7. Valuation and risk-assessment of income-producing properties
8. Financial leverage Real estate investment trusts
9. Optimal portfolio theory Dynamics of the last housing boom and bust
10. Emerging market forces in commercial real estate

- **Suggested Readings**

Archer, Wayne R., and David C. Ling, "The three dimensions of real estate markets (1997): Linking space, capital, and property markets", *Real Estate Finance* 14.3 : 5-11.

Brueggeman, W. B. and J. D. Fisher (2005), *Real Estate Finance & Investments*, (13th edition or newer), New York City, NY: McGraw-Hill/Irwin.

Gunnelin, Ake, et al. (2004): "Determinants of cross- sectional variation in discount rates, growth rates and exit cap rates", *Real Estate Economics* 32.2 : 217-237.

O'Sullivan, Arthur (2007): *Urban Economics*, McGraw-Hill/Irwin.

McDonald, J. F. and McMillen, D. P. (2011), *Urban Economics and Real Estate, Theory and Policy*, (2nd edition), Blackwell.

4.5.3 Financial Markets: EC503

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits**: 5

- **Course Objectives**

This course aims to familiarize the students with the concepts and theories related to financial markets. The course focuses on the money market, credit market, stock market, financial derivatives and foreign exchange market. The course also includes a discussion on the interlinkages between the various financial markets.

- **Course Learning Outcomes**

  On successful completion of this course, students will be able to: 1. Understand the basic concepts and working of financial markets.

  2. Relate to the theories pertaining to financial markets and their link with monetary policy.

  3. Use econometric software to analyse financial data (optional).

- **Content: Unit-wise**

  1. Money Market:

     Analytics of Monetary Policy; Rules v/s Discretion; Optimal Instruments of Monetary Policy; Transmission Channels of Monetary Policy; Unconventional Monetary Policy.

  2. Credit Market:

     Imperfect Information in Credit Market; Market Failure.

  3. Stock Market:

     Portfolio Selection-Markowitz Approach, Feasible and Efficient Set; New Portfolio Theory-Capital Asset Pricing Model, Arbitrage Pricing Theory; Consumption Capital Asset Pricing Model, Equity Premium Puzzle.

  4. Financial Derivatives Market:

     Options and Futures, Pricing of Options-Black-Scholes Model and Binomial Option Pricing Model; Pricing of Futures.

  5. Foreign Exchange Market:

     Exchange Rate-Portfolio Balance Model; Monetary Model; Dornbusch Model of Overshooting Exchange Rates; Asian Financial Crisis; Global Financial Crisis.

- **Suggested Readings**

  Bernanke, B. and Blinder, A. (1998): "Credit Money and Aggregate Demand", *American Economic Review*.

  Blanchard, O. and Fischer, S.: *Lectures on Macroeconomics*, MIT Press (1989).

  Bodie, Z., Kane, A. and Marcus, A.: *Investments*, 11th Edition, McGraw Hill Education (2017).

  Dornbusch, R. (1976): "Expectations and Exchange Rate Dynamics", *Journal of Political Economy*.

  Gandolfo, G.: *International Finance and Open Economy Macroeconomics*, Springer (2016).

  Fischer, S. (1990): "Rules v/s Discretion in Monetary Policy", in *Handbook of Monetary Economics*, vol. 2, Friedman, B. and Hahn, F. (ed.) North Holland.

  Jaffee, D. and Stiglitz, J. (1990): "Credit Rationing" in *Handbook of Monetary Economics*, vol. 2, Friedman, B. and Hahn, F. (ed.) North Holland.

Pilbeam, K.: *International Finance*, 4th Edition, Macmillan (2013).

Romer, D.: *Advanced Macroeconomics*, 5th Edition McGraw-Hill (2018).

Sharpe, W., Alexander, G. and Bailey, J.: *Investments*, 6th Edition Prentice Hall (1998).

Stiglitz, J. and Guzman, M. (ed.): *Contemporary Issues in Macroeconomics: Lessons from the Crisis and Beyond*, Palgrave Macmillan (2016).

Walsh, C.: *Monetary Theory and Policy*, 4th Edition, MIT Press (2017).

4.6 Public Policy: Theory and Institutions

4.6.1 Public Economics I: EC601

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  Public Economics is a large and rapidly expanding field of research. It is concerned with normative and positive aspects of a government's activities in an economy. Normative analysis is concerned with how a government should behave to improve social welfare and positive analysis studies the implications of government activities on the behavior of individuals and communities. Governments intervene through regulation, taxation, redistributive transfers, and the provision and production of private and public goods. This course will focus on public spending on public goods, regulation in the presence of externalities and redistributive policy. It will cover important theoretical results in the field and a number of case studies from across the world.

- **Course Learning Outcomes**

  By the end of the course, students will be familiar with important theoretical results in this area and with empirical trends in public spending across the world. They will also be guided in developing their writing skills to express ideas within this field to popular readers.

- **Content: Unit-wise**

  1. The emergence of a social state:
     The evolution of social spending across the world since the early twentieth century.
  2. Efficiency in the provision of public goods:
     The types and quantities of public goods that should be provided.
  3. Externalities and their regulation:
     Sources of externalities, their relationship to contracts and markets and their regulation.

4. Inequality and Distributive Justice:

   Theories of justice. Discrimination. Public policies to tackle group inequalities.

5. Preference Aggregation and Public debate:

   How do we determine provision when we do not know preferences? Voting and other forms of information aggregate in democracies.

- **Suggested Readings**

  Anthony Atkinson and Joseph E Stiglitz: *Lectures on public economics*, Princeton University Press (2015)

  Peter Lindert: *Growing public: Volume 1, the story: Social spending and economic growth since the eighteenth century*, Cambridge University Press (2006)

  Glenn Loury (1994): Self-censorship in public discourse: a theory of political correctness and related phenomena. *Rationality and Society* 6(4), 428 − 461

  Robert Nozick: *Anarchy, state, and utopia*, Basic books (2013)

  Thomas Piketty: *Capital in the 21st century*, Cambridge: Harvard University Press (2014)

  J. Rawls: *Justice as fairness: A restatement*, Harvard University Press (2001)

  J. Roemer: *Equality of opportunity*, Harvard University Press (2009)

4.6.2   Public Economics II: EC602

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course covers several topics in Public Economics at an advanced level. The course contents draw upon the recent theoretical and empirical research on the issues covered. The focus of the course is on the following areas: Taxes, Land Markets, Procurement of Public Goods, and Public vs. Private organizations. Each area covered starts with a mathematical model that serves as a basic framework of analysis. The analytical framework is then is extended to cover results from contemporary research works. The reading material and classroom lectures make use of mathematical tools of economic analysis, especially the optimization techniques, and the basic results from the game-theory and information economics.

- **Course Learning Outcomes**

  The learning outcomes of the course as follows: First, students successfully completing this course will enhance their skill to develop formal analytical framework to examine the settings and areas covered in the course. Second, they will learn about the incentive

structure for the individuals and firms involved. Finally, they will learn to draw the policy conclusions related to Taxes, Land Markets, Procurement of Public Goods, and Public vs. Private organizations.

- **Content: Unit-wise**

  1. Taxation:

     Direct Tax, Optimal Taxation; Property and Wealth Taxes; Stamp-Duty Tax; Indirect Tax and Goods and Services Tax (GST); Taxation in India; Tax Evasion and Black Income; Income Inequalities.

  2. Land Markets:

     Land as a Factor of Production; Market in land property, Anti-commons and Land Assembly Problem; Compensation-Efficiency Paradox; Economics and Politics of Land Acquisition; Land supply regulations.

  3. Public Goods and Public Procurement:

     Public Goods; Public versus Private Provisions; Public versus Private Investment; Procurement Contracts; Public Private Partnerships (PPPs) versus Privatization; Incentives and Outcomes under PPP Contracts; Theories of neighborhood development.

  4. Public versus Private Organization:

     Basics of Contract Theory; Risk allocation and Moral Hazard; Incentives in Private and Public versus Private organizations; Bureaucrats versus Managers; Multi-tasks, etc.

- **Suggested Readings**

  Bolton, P. and M. Dewatripont: *Contract Theory*, MIT Press (2005)

  Stiglitz, J. and Rosengard, J.: *Economics of the Public Sector*, 4th edition, W. W. Norton and Company (2015)

  Bernard Salanie: *Economics of Taxation* 2nd Ed. MIT Press (2011)

  Mirrlees, James et al. (2011). *Tax by Design*, Oxford University Press. Available at $https://www.ifs.org.uk/publications/5353$

  Miceli, Thomas J.: *The Economic Theory of Eminent Domain: Private Property, Public Use*, 1st Edition. Cambridge University Press (2012)

  Anthony B. Atkinson, Joseph E. Stiglitz: *Lectures on Public Economics - Updated Edition.* Princeton University Press (2015)

4.6.3   Environmental Economics: EC603

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective of this course is to present an economic approach to environmental problems such as air and water pollution. Alternative methods of addressing pollution, namely, direct regulation and market based instruments (taxes and tradable permits) are compared and contrasted, especially in the presence of asymmetric information. This is followed by techniques for measuring the benefits of environmental improvements and their applications.

- **Course Learning Outcomes**

  A logical, coherent and sensible understanding of the reasons for (and solutions to) environmental problems. In particular, an ability to apply economic theory to environmental issues with a view to developing effective and rational environmental policies.

- **Course Content: Unit-wise**

  1. Externalities and public goods
  2. Corrective mechanisms (taxes, subsidies, permits)
  3. Regulation with moral hazard and adverse selection
  4. Valuation of non-market goods and amenities: overview and basic theory.
  5. Revealed preference (indirect market methods); health valuation; constructed markets (direct market methods).
  6. Cost-benefit analysis: measuring the cost of environmental policy; estimation of abatement cost functions; damage function assessment; discounting.

- **Suggested Readings**

  K. G. Mäler, J. Vincent: *Handbook of Environmental Economics*, Elsevier (2005)

  Phaneuf and Requate: *A Course in Environmental Economics: Theory, Policy and Practice*, Cambridge University Press (2017)

  Freeman, Herriges and Kling: *The Measurement of Environmental and Resource Values: Theory and Methods*, 3rd ed. RFF Press/Routledge (2014)

  W. Baumol, W. Oates: The Theory of Environmental Policy. Cambridge University Press (1988)

  Champ, Boyle and Brown: *A Primer on Nonmarket Valuation*. Springer (2003)

  Articles from journals and working papers.

4.6.4 Law and Economics: EC604

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course examines how the legal and regulatory rules shape rules of the game in a market economy which, in turn, shape the incentive structure for private individuals, firms and other economic agents, and affect the allocation of resources, efficiency and equity.

- **Course Learning Outcomes**

  This course will educate students about how to apply an economic approach toward thinking about the law and regulatory rules. Students will learn how the law is an important organizing force that influences actions of the private citizens as well as various official and regulatory agencies. Students will also learn how the law can support and, at times, can conflict with the functioning of the market and the government, the latter are other organizing forces important for functioning of an economy. The course will enhance critical thinking and inter-disciplinary approach towards law and economics. Thereby, the course will help develop inter-disciplinary approaches and skills and enhance the employability of the students.

- **Content: Unit-wise**

  1. Introduction:
     Efficiency criteria in Law and Economics.
  2. Contract Law:
     Need for a contract; Legal contract; Role of Contracts for functioning of markets; Efficient contracts; Complete and Incomplete Contracts; Reliance; Damages measures and their efficiency properties; Contracts as instrument of risk-allocation and information revelation; Regulatory Contracts; Contracts and Courts.
  3. Property Law and Eminent Domain:
     Property Rights and their role in resource allocation; Transaction costs and Coase theorem; Legal remedies for breach of property rights; Intellectual Property Rights; Eminent Domain and Compulsory acquisition of land and other private property.
  4. Civil Liability and Criminal Law:
     Tort law; liability rules versus property rights; accident law; product liability; efficiency properties of liability rules; efficiency-compensation trade-off; Rational crimes; Crime and Punishment; Severity versus Certainty of punishment
  5. Litigation and Arbitration:
     Litigation and Arbitration; Litigation under asymmetric information; Litigation over compensation under eminent domain; .
  6. Topics in Law and Economics in India:
     Topics and Debt Contracts; Insurance Contracts; Insolvency and Bankruptcy Code.

- **Suggested Readings**

  Jain, S K and Ram Singh (2002), 'Efficient liability rules: Complete characterization', *Journal of Economics*, 2002, Vol. 75, pp. 105-124.

  Miceli, Thomas J.: *The Economic of the Law*, Oxford University Press (1997)

Polinsky, A. Mitchell and Steven Shavell (Editors) (2007), *Handbook of Law and Economics*, Volumes 1 and 2, North Holland, Amsterdam.

SchÃd'fer, H-B and Singh Ram. (2018) 'Takings of Land by Self-interested Governments: Economic Analysis of Eminent Domain', Journal of *Law and Economics*, pp 427-459.

In addition to the above readings, the course will use several research papers.

4.6.5   Natural Resource Economics: EC605

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective of this course is to examine the allocation of renewable and non-renewable resources over time from positive and normative points of view. The role of markets and institutions is examined.

- **Course Learning Outcomes**

  Students will acquire the ability to delve into the Microeconomic foundations of resource management, and the use of public policy to encourage the optimal use of natural resources.

- Content : Unit-wise

  1. Dynamic optimisation: deterministic discrete-time and continuous-time models. Stochastic models.

  2. Renewable resources: optimal management. Common property and open access. Fishery: Models of growth with open and regulated open access. Optimal harvest. Stochastic growth. Forestry: Optimal stopping rules.

  3. Non-renewable resources: The Hotelling rule and social welfare. Variations on the Hotelling rule: exploration, uncertainty in demand and reserves, entry and exit.

  4. Growth with exhaustible resources, concepts and measures of resource scarcity. Natural resource accounting.

- **Suggested Readings** J. Conrad: *Resource Economics, 2nd ed.*, Cambridge University Press (2010)

  L. Karp: *Natural Resources as Capital: Theory and Policy*, (2015)

  M. Murty, S. Kumar: *Environmental and Economic Accounting for Industry*, Oxford University Press (2004)

  R. Perman, Y. Ma, J. Mcgilvray: *Natural Resource and Environmental Economics*, Pearson (2011)

D. Phaneuf, T. Rquate: *A Course in Environmental Economics: theory, policy and practice*, Cambridge University Press (2016)

Moreover, readings in the form of journal articles and working papers.

4.6.6 Energy Economics: EC606

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course would explore theoretical and empirical perspectives on the topics related to energy demand, energy supply, energy markets, environmental consequences of energy use, and policies and regulatory mechanism for the sector. Main topics of the course would be illustrated with the relevant global regulatory experiences of the energy sector.

- **Course Learning Outcomes** This course would intends to provide theoretical and empirical perspectives on the topics related to energy demand, energy supply, energy markets; environmental consequences of energy use, and policies and regulatory mechanism for the sector.

- **Content : Unit-wise**

  1. Energy demand analysis and forecasting
  2. Economics of energy supply
  3. Energy markets
  4. Economics of energy-environment interaction
  5. Regulation and governance of energy sector
  6. Energy efficiency and innovations

- **Suggested Readings** S. Bhattacharyya: *Energy Economics*, Springer (2011)

  L. Hunt, J. Evans (eds.): *International Handbook on the Economics of Energy*, Edward Elgar (2011)

  A. Kneese, J. Sweeney (eds.): *Handbook of Natural Resource and Energy Economics, Vol. III*, Elsevier Science Publishers (1993)

  J. Shogren: *Encyclopaedia of Energy, Natural Resource, and Environmental Economics*, Newnes (2013)

  Moreover, readings in the form of journal articles and working papers.

4.6.7 Welfare Economics: EC607

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The aim of the course is to examine alternative ways in which microeconomic theory might be applied to analyse collective decision making. A normative approach based on the assumption that government is benign assumes government will maximise social welfare. By comparison, a positive approach (premised on analysis of the objectives and constraints faced by actors in decision-making processes) offers an alternative application of microeconomic theory.

- **Course Learning Outcomes**

  1. Learn economic models that study how policy makers and governments take decisions.
  2. Develop the ability to: apply microeconomic theory to analyse collective action and public policy; assess reform of public spending and taxation against a set of criteria (which includes efficiency and equity), and explain why there is dissonance between analysis of what governments and policymakers should do and what they actually do.

- **Content: Unit-wise**

  1. Reasons for collective choice:
     Public goods, Externalities, Redistribution.
  2. Public choice in direct and representative democracies:
     Collective decision making and voting rules; Voting and median voter model; Rent seeking, Lobbying and corruption.
  3. Some applications:
     Fiscal policies and taxation; Local public goods; Market failure vs. Government failure.

- **Suggested Readings**

  Mueller, D.: *Public Choice III*. Cambridge University Press (2003).

  Kosfeld, Okada and Riedl (2009), Institution formation in public goods games, *American Economic Review*, 99(4), 1335-1355.

  Krupka and Weber (2013): "Identifying social norms using coordination games: Why does dictator game sharing vary?", *Journal of the European Economic Association*, 11(3):495-524.

  Black, D. (1948): "On the Rationale of Group Decision Making'", *Journal of Political Economy*, 56(1), 23-34.

Meltzer and Richard (1981): "A Rational Theory of the Size of Government", *Journal of Political Economy*, 89(5), 914-927.

Besley, T. and Coate, S. (2003): "Centralized versus Decentralized Provision of Local Public Goods", *Journal of Public Economics*, (87): 2611-2637.

Articles from journals and working papers.

4.6.8 Economics of Regulation: EC608

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective of this course is to introduce the role of government in altering market outcomes when either competitive forces are weak or competitive equilibrium fails. It draws from areas such as welfare economics, public economics, and industrial organisation.

- **Course Learning Outcomes** Student learning will focus on competition policy and economic regulation. They will also be introduced to a growing area of study and policy design, that of the introduction of market m.echanisms into formerly regulated industries.

- **Content : Unit-wise**

  1. The role of government. The making of a regulation. Possible instrument choices. Why one instrument over another? Social cost-benefit analysis. Consequences of regulation.

  2. Introduction to economic regulation. Motivation behind economic regulation. Potential instruments for regulation. Goals of regulation. Historic background.

  3. Theories of regulation: normative and positive analysis, interest groups theory.

  4. Public Enterprise. The origins of public ownership as a way to regulate economic activity. Public vs. private ownership. Does the threat of nationalisation/municipalisation discipline private firms?

  5. Regulating natural monopolies:

     (a) Pricing strategies, rate structure, peak load pricing. Averch-Johnson model.
     (b) Sustainability of natural monopolies and contestability

  6. Regulating natural monopolies under asymmetric information: Problems of natural monopoly and theory of regulatory policy solutions.

     Incomplete information games. Mechanism design and implementation theory. Revelation principles.

  7. Franchise bidding: The case of cable television. Using franchise bidding as an alternative to regulation in the case of a natural monopoly.

8. Regulation of innovation and patents.

- **Suggested Readings** W. Viscusi, J. Vernon, J. Harrington: *Economics of Regulation and Antitrust*, MIT Press (2005).

  P. Joskow: *Regulation of Natural Monopolies*, Handbook of Law and Economics (2006)

  M. Armstrong, D. Sappington: *Recent Developments in the Theory of Regulation*, (2003)

  M. Motta: *Competition Policy: Theory and Practice*, Cambridge University Press (2004)

  R. Sherman: *Regulation of Monopoly*, Cambridge University Press (1989)

  J.-J. Laffont, J. Tirole: *A Theory of Incentives in Procurement and Regulation*, MIT Press (1993)

  H. Averch, L. Johnson: Behavior of the firm under regulatory constraint, *American Economic Review* 52, 1053-1069 (1962)

  J. Willner: Privatisation and liberalisation in an industry with network externalities, *Economics Letters* 91, 197-203 (2006)

  J. Vickers, Yarrow: Privatization: an economic analysis, in Privatization: An Economic Analysis. MIT Press (1988)

  P. Klemperer: How (not) to run auctions: The European 3G telecom auctions, *European Economic Review* 46, 829-845 (2002)

  M. Pollitt, A. Smith: The restructuring and privatisation of British Rail: Was it really that bad?, *Fiscal Studies* 23, 463-502 (2002)

  P. Joskow: California's electricity crisis, *Oxford Review of Economic Policy* 17, 365-388 (2001)

4.6.9   Climate Change Economics: EC609

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The objective of this course is to analyse climate change from an economic perspective. The problem is characterised as one of regulating a global stock externality in an intertemporal setting and in the presence of uncertainty and irreversibility.

- **Course Learning Outcomes** (1) A logical, coherent and sensible understanding of the reasons for (and solutions to) climate change. (2) Develop the ability to apply economic theory to climate issues with a view to developing effective and rational policies to address climate change.

- **Content: Unit-wise**

  1. Overview:
     Basics of climate science; international response to climate change.
  2. Integrated Assessment Models (IAMs) and the social cost of carbon; choice of discount rate for climate policy; declining discount rate (DDR).
  3. Technical change and fossil energy consumption: responses to climate change in an endogenous growth model with clean and dirty technologies; implications of a transition to clean technologies in an IAM.
  4. Stern Review on the economics of climate change: analytical foundations, findings and policy implications.
  5. ?Tipping points? and non-linearities in the climate system and their role in formulating climate policy: fat tail probability distributions and Weitzman Dismal Theorem.
  6. Mitigation (tradable permits and carbon taxes); economic impacts and adaptation.
  7. Green paradox and carbon leakage.
  8. Environmental treaties; applying non-cooperative and co-operative game theory.

- **Suggested Readings**

  F. Ackerman, E. Stanton: *Climate Economics: State of the Art.* Routledge (2013)

  W. Nordhaus: *A Question of Balance.* Yale University Press (2008)

  D. Acemoglu, P. Aghion, Leonardo Bursztyn, D Hemous. (2012). "The environment and directed technical change," American Economic Review, 102(1): 131-166.

  M. Weitzman, M.L. (2009). "On modeling and interpreting the economics of catastrophic climate change." The Review of Economics and Statistics, 91(1), pp.1-19.

  Articles from journals and working papers.

4.7 Development Economics

4.7.1 Topics in Development Economics: EC701

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course intends to acquaint students with knowledge about some important development issues.

- **Course Learning Outcomes**

  Knowledge about development issues, both from a theoretical as well as empirical perspective.

- **Content: Unit-wise**

    1. International debt and development

       Two-gap models; transfer paradox; international debt issues; loan pushing; debt forgiveness; loan buybacks; debt-equity swaps; empirical studies

    2. Intellectual property rights and development

       TRIPs Agreement; innovation systems; IPR and technology transfer, problems with IPR

    3. Wage Rigidity and Unemployment

       Theory of implicit cooperation; labour turnover model; nutrition-based efficiency theory of wages

    4. Rural Credit Markets

       Lender's risk hypothesis; monopolistic markets; implicit interest charges; credit as insurance; micro-finance

    5. Interlinkage in Rural Markets

       Potential risk; models of interlinked markets; implications for theory and policy; moral hazard and interlinkage

    6. Inequality and Development

       Reasons for a direct relation; reasons for an inverse relation; empirical studies

- **Suggested Readings**

  Basu, Kaushik (2003): *Analytical development economics: The less developed economy revisited*, MIT Press Cambridge.

  Eaton, Jonathan (1993): Sovereign debt: A primer, *World Bank Economic Review*, 7(2), 137-172.

  Maskus, Keith E. (2000): Intellectual Property Rights and the Global Economy, Institute for International Economics, Washington, D.C.

  Kanwar, Sunil (2012): Intellectual Property Protection and Technology Licensing: The Case of Developing Countries, *Journal of Law and Economics*, 55(3), 539-564.

  Ivus, Olena (2010): Do stronger patent rights raise high-tech exports to the developing world?, *Journal of International Economics*, 81(1), 38-47.

  Javorcik, Beata S. (2004), The Composition of Foreign Direct Investment and Protection of Intellectual Property Rights: Evidence from Transition Economies, *European Economic Review*, 48(1), 39-62

  Watal, Jayashree (2000): Pharmaceutical Patents, Prices and Welfare Losses: Policy Options for India Under the WTO TRIPS Agreement, **The World Economy**, 23(5), 733-752.

  Morduch, Jonathan (1999): The Microfinance Promise, **Journal of Literature**, 37(4), 1569-1614 (omit sections 5.2, 6, 7)

Banerjee, Abhijit; E. Duflo, R. Glennerster, and C.G. Kinnan (2015): The Miracle of Microfinance? Evidence from a Randomized Evaluation, *American Economic Journal: Applied Economics*, 7(1), 22-53.

Bell, Clive and T.N. Srinivasan (1989): 'Interlinked transactions in rural markets: An empirical study of Andhra Pradesh, Bihar and Punjab', *Oxford Bulletin of Economics and Statistics*, 51(1), 73-83

4.7.2 Trade and Development: EC702

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  Flow of international trade and capital can create employment, enhance access to technology and knowledge, raise productivity, increase the variety and quality of goods available to consumers, stimulate capital inflows, increase foreign exchange earnings, and generate resources for sustainable development and poverty reduction. However, this positive relationship is not automatic and does not necessarily take place in all countries and contexts. This course is designed to make the students familiar with application of the existing trade theories and policies on the emerging debates in relation to the growth and development. Specifically, the impact of trade policies on welfare gains, employment, pro-poor growth, inequality and environment would be discussed along with role of WTO.

- **Course Learning Outcomes**

  The students will be exposed to standard empirical tools applied for estimating welfare gains from trade, gravity modelling, productivity analysis and pro-poor growth. It will update the understand the effects of tariffs and subsidies on trade patterns and the welfare of trading nations, explain how international negotiations and agreements have promoted world trade as well as Identify and measure the sources of economic growth using conventional and advanced methods.

- **Content: Unit-wise**

  1. Trade policies (tariff and non-tariff barriers) and implications
  2. Analytical Approaches to Global Institutions (Public and Private) and Trade Policy
  3. Trade creation and diversion and gravity modelling
  4. Political economy of trade agreements and role of WTO
  5. Issues in Trade, Welfare and Growth
     - Trade - gains and methods
     - Trade, FDI and growth (immiserating growth, spillovers, competition effects)
     - Trade, inequality, distributive conflict, pro-poor growth

– Fair trade and industrial policy - labor standards, environment

6. Emigration, trade and development

7. Global production and issues

- **Suggested Readings**

Bagwell, K. and Staiger, R.W. (2018): Handbook of Commercial Policy, Vol 1A and 1B, North-Holland: Elsevier.

Irwin, Douglas (2015): *Free Trade Under Fire*, Princeton University Press.

Feenstra, Robert C. (1992): "How Costly is Protectionism?" *The Journal of Economic Perspectives* 6(3): 159-78.

Baldwin, Robert E. (1989): "The Political Economy of Trade Policy." The *Journal of Economic Perspectives* 3(4) : 119-35.

Krugman, Paul R.(1987): "Is Free Trade PassÃl'?" *The Journal of Economic Perspectives* 1(2): 131-44.

Brown, Drusilla, Alan Deardorff, and Stern, Robert (2012): "Issues of Environmental and Labor Standards in the Global Trading System." In Black, Stanley W. (ed.) *Globalization, Technological Change, and Labor Markets*, Springer.

Costinot A., and A. Rodriguez-Clare (2013): "Trade Theory with Numbers: Quantifying the Consequences of Globalization." NBER Working Paper no. 18896

Anderson, James E, and Van Wincoop (2004): "Trade Costs." *Journal of Economic Literature* 42 : 691-751.

Grossman,G. and Helpman, E. (1994): "Protection for Sale" *American Economic Review* 84(4): 833-50.

Bagwell, Kyle, and Staiger, R. W. (1999): "An Economic Theory of GATT." *American Economic Review* 89(1) : 215-48.

Grossman, G., and E. Helpman. (1995): "Trade Wars and Trade Talks." *Journal of Political Economy* 103, 675-708. (NBER Working Paper no. 4280)

Maggi, G., and A. RodrÃ■guez-Clare (1998): "The Value of Trade Agreements in the Presence of Political Pressures." *Journal of Political Economy* 106(3) : 574-601.

Horn, Henrik, G. Maggi, et al. (2010): "Trade Agreements as Endogenously Incomplete Contracts." *American Economic Review* 100(1) : 394-419.

Feenstra, Robert C. (2015): *Advanced International Trade: Theory and Evidence.* Princeton University Press

Falkner, Robert (ed.) (2016): The Handbook of Global Climate and Environment Policy, Cheltenham: John Wiley and Sons.

Harman, Sophie and Williams, David (eds), Governing the World? Cases in Global Governance, London: Routledge, .

4.7.3 Environment and Development: EC703

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Outline**

  The objective of this course is to examine the interaction between environmental and natural resources and economic development with a focus on South Asia. The emphasis is on analysing environmental problems associated with economic development using the tools of economic analysis.

- **Course Learning Outcomes**

  The course will provide an understanding of the underlying causes of environmental problems such as deforestation and pollution. It will also enable students to operationalise the concept of sustainable development through concepts such as green accounting.

- **Content: Unit-wise**

  1. Overview: Eenvironmental problems and economic development in South Asia. Inter linkages between poverty, population and environmental degradation.

  2. Sustainability:

     Concepts and measures of sustainability and whether sustainable development is desirable and feasible.

  3. Economic growth and environment:

     Does economic growth inevitably result in environmental degradation? Is there a turning point beyond which increases in income lead to better environmental quality?

  4. Institutions for management of common pool natural resources; applications in the context of deforestation and water.

  5. Interlinkage in Rural Markets

     Potential risk; models of interlinked markets; implications for theory and policy; moral hazard and interlinkage

  6. Urban/industrial environmental problems:

     Dimensions, special features (small-scale industries and informal sector), regulatory approaches, alternatives (judicial, market-based instruments).

  7. International dimensions:

     Trade and environment: South Asian perspective, climate change: impacts, mitigation and adaptation strategies.

- **Suggested Readings**

  Stevenson, G.G. (1991): *Common Property Economics: General Theory and Land Use Applications*, Cambridge University Press.

Baland, J-M. and Platteau, J-P. (1996): *Halting Degradation of Natural Resources: Is there a Role for Rural Communities?* Clarendon Press, Oxford.

Greenstone, M., and Jack, B. (2015): "Envirodevonomics: A research agenda for an emerging field", *Journal of Economic Literature*, 53(1), 5-42.

Ostrom, E. (2000): "Collective Action and the Evolution of Social Norms", *Journal of Economic Perspectives*, 14(3): 137-158.

Perman, R., Ma, Y., McGilvray, J. and Common, M. (2013): *Natural Resource and Environmental Economics*, Pearson, 4th edition.

Articles from journals and working papers.

4.7.4 Agricultural Economics: EC704

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Outline**

  The aim of this course to provide students with an in-depth understanding of the issues relating to Indian agriculture and farmers' welfare. The focus is on analyzing structural patterns in Indian agriculture, and how policies have influenced farmers' choices and incomes. The approach is modular, and will depend on the policy discourse.

- **Course Learning Outcomes**

  Students will be able to participate in decision making related to the agricultural sector, and to have sufficient background to undertake independent research in this area.

- **Content: Unit-wise**

  1. Agricultural productivity trends and climate change
  2. Input-use efficiency and climate-related risk-mitigation strategies:
     Seeds; Water (and electricity); Fertilizer; Labour.
  3. Agricultural insurance
  4. Market infrastructure
  5. Price policy
  6. Agriculture and nutrition

- **Suggested Readings**

  Given the nature of the course, readings may be updated annually.

  Binswanger, H. (2012): "Is There Too Much Hype about Index-based Agricultural Insurance?" *Journal of Development Studies*.

Chand, R.; Saxena, Raka and Rana, S. (2015): "Estimates and Analysis of Farm Income in India", *Economic and Political Weekly*, May 30.

Chatterjee, S. and Kapur, D. (2016): "Understanding Price Variation in Agricultural Commodities in India: MSP, Government Procurement, and Agriculture Markets", *India Policy Forum*.

Emerick, K.; de Janvry, A.; Sadoulet, E. and Dar, M. (2016): "Technological Innovations, Downside Risk and the Modernization of Agriculture", *American Economic Review*.

Fishman, R. (2018): " Groundwater Depletion Limits the Scope for Adoption to Increased Rainfall Variability in India", Climatic Change.

Fishman, R.; Kishore, A.; Rothler, Y.; Ward, P.; Jha, S. and Singh, R.K.P. (2016): "Can Information Help Reduce Imbalanced Application of Fertilizer in India? Experimental Evidence from Bihar".

Gill, S.S. and Nehra, K.(2018): "Subsidy and Efficiency of Groundwater Use and Power Consumption in Haryana". *Economic and Political Weekly*, December 2018.

Ministry of Agriculture (2018): Report of the Committee for Doubling Farmer Incomes, selected section.

Negi, D.S. and Ramaswami, B. (2019): Basis Risk in Index Insurance: Lower Tail Dependence and the Demand for Weather Insurance.

Ramaswami, B.C. and Lalitha, N. (2012): "The Spread of Illegal Transgenic Cotton Varieties in India: Biosafety Regulation, Monopoly and Enforcement", *World Development*.

Roy, D.; Joshi, P.K. and Chandra, R. (2017): Pulses for Nutrition in India: Changing Patterns from Farm to Fork.

Sekhri, S. (2013): Sustaining Groundwater: Role of Policy Reforms in Promoting Conservation in India.? In Shekhar Shah, Barry Bosworth and Arvind Panagariya, editors, India Policy Forum, volume 9.

Vargas, R.; Hill, M. Robles and Ceballos, F. (2016): "Demand for a Simple Weather Insurance Product in India: Theory and Evidence", *American Journal of Agricultural Economics*.

Articles from journals and working papers.

4.7.5 Economics of Health and Education: EC705

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**:

Education and health are two critical aspects of well-being. The objective of this course is to explore how these are determined and related to other features of a society. This involves thinking about the proper measurement of outcomes in these areas, modelling individual, community and government decisions and evaluating public policy programs.

- **Course Learning Outcomes:**

Students will learn to develop microeconomic models that relate family and neighborhood composition to health outcomes and schooling choices. They will also learn how to estimate treatment effects in order to evaluate public programs.

- **Content: Unit-wise**

  1. **Measurement and trends:** Correlation between alternative measures of well-being. The spread of education across the world. Budgetary allocations across space and time.
  2. **Institutional design** Alternative systems for service delivery. The role of imperfect information, incentives and contracts.
  3. **Discrimination and inequality:** Models of preference-based and statistical discrimination. Effective policies to address historical inequalities
  4. **Environmental health:** Estimating impact and designing appropriate regulation to regulate social damages through environmental externalities
  5. **The political economy of public policy:** The role of community structure in determining the distribution of public goods. Models of voting and collective action.
  6. **Evaluating policy impact:** The estimation of treatment effects in randomized experiments and in observational data.

- **Selected Readings**

Banerjee, A. and Somanathan, R. (2007): "The Political Economy of Public Goods: Some Evidence from India." *Journal of Development Economics*, 82(2), 542-559.

Becker, G. (1962): "Investment in Human Capital: a Theoretical Analysis." *The Journal of Political Economy*, 70(5), 9-49.

Benabou, R. (1993): "Workings of a City." *Quarterly Journal of Economics*, 108(3), 619-652.

David Cutler and Grant Miller (2005): "The Role of Public Health Improvements in Health Advances: The Twentieth-Century United States." *Demography* 42(1), 1-22.

Angus Deaton (2013): *The Great Escape: Health, Wealth and the Origins of Inequality*, Princeton University Press.

Robert Fogel (2004): "Health, nutrition and economic growth." *Economic Development and Cultural Change*, 52(3), 643-658

Galanter, M. (1984): "Competing Equalities: Law and the Backward Classes in India," University of California Press.

Loury, G. (2002): *The Anatomy of Racial Inequality.* Harvard University Press.

Preston, S. (1996): "American Longevity: Past, Present and Future." Distinguished Lecture in Aging, Syracuse University.

Sethi, R. and Somanathan, R. (2004): "Inequality and Segregation", *Journal of Political Economy*, 112(6), 1296-1321.

Spence, M. (1973): "Job Market Signaling." *Quarterly Journal of Economics*, 87(3), 355-374.

Tiebout, C. (1956): "A pure theory of local expenditures.?" *Journal of Political Economy* 64(5), 416-424

Wooldridge, J.: *Econometric analysis of cross section and panel data.* MIT press (2010).

4.8 Industrial Economics

4.8.1 Industrial Organisation: EC801

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  This course provides a foundation for the study of theoretical models of industrial organisation. This field of study is mainly concerned with different strategic motives and interactions in oligopolistic markets, employing the techniques taught in the compulsory course on Game Theory. It also provides a theoretical framework for analysis of antitrust/competition policy, as well as other policies relating to regulation, innovation, intellectual property rights, and strategic trade policy, which are covered in other courses.

- **Course Learning Outcomes** Upon completing this course, the student would have learned to think analytically, using game theoretic tools, about the principal issues concerning oligopolistic markets, competition, and apply them to the real world of industry. They would also be prepared to understand competition policy more naturally and foundationally.

- **Content : Unit-wise**

  1. Static oligopoly models with homogenous and differentiated products. Strategic substitutes and strategic complements. Dynamic models: Stackelberg and free entry.

2. Spatial models of horizontal and vertical product differentiation.

3. Repeated game oligopoly: Stability and sustainability of cartels.

4. Entry and entry deterrence strategies.

5. Vertically related markets and vertical contracts between firms.

- **Suggested Readings** M. Armstrong, R. Porter: *Handbook of Industrial Organization, Vol. III*, North-Holland (2007)

  P. Belleflamme, M. Peitz: *Industrial Organisation: Markets and Strategies*, Cambridge University Press (2015)

  L. Cabral: *Introduction to Industrial Organization*, MIT Press (2017)

  O. Shy: *Industrial Organization: Theory and Applications*, MIT Press (1996)

  J. Tirole: *The Theory of Industrial Organization*, MIT Press (1988)

4.8.2   Economic Theory of the Firm: EC802

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  The firm is the foundation for all production activity. The course analyses the factors determining the boundaries of firms with special focus on vertical integration and horizontal expansions. The design of internal organisation and managerial roles are studied.

- **Course Learning Outcomes**

  The student will understand the nature of the firm and its governance structure and also the different strategic aspects of firms' decision making.

- **Content: Unit-wise**

  1. Boundaries and nature of the firm

  2. Vertical and horizontal integration

  3. Make or buy decisions and outsourcing of inputs

  4. Managerial behaviour and incentives

  5. Technology innovation and efficiency

- **Suggested Readings**

  Tirole, J.: *The Theory of Industrial Organization*, MIT Press (1988).

  Shy, O.: *Industrial Organization: Theory and Applications*, MIT Press (1995).

The course is based on many journal articles and some of them are listed below:

Holmstrĺűm, B. and Tirole, J. (1987): "The Theory of the Firm" in *Handbook of Industrial Organization*, ed. By Schmalensee, R. and Willig, R. Amsterdam, North-Holland

Williamson, O. (1981): "The modern corporation: origins, evolution, attributes", *Journal of Economic Literature*, December, 1537-1568.

Hart, O., (1995): "Corporate Governance : some theory and implications", *Economic Journal*, 678-689.

Gibbons, R, (2005): "Four formal(izable) theories of the firm", *Journal of Economic Behavior and Organization* Vol. 58.

Grossman, S. and Hart, O. (1986): "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration", *Journal of Political Economy*, 94(August): 691-719.

Shy, O. and Stenbacka, R. (2003): "Strategic Outsourcing", *Journal of Economic Behavior and Organization*, 50: 203-224.

Buehler, S. and Haucap, J. (2006): "Strategic Outsourcing Revisited", *Journal of Economic Behavior and Organization*, 61: 325-338.

Arya, A., Mittendorf, B., Sappington, D., (2008): "The make-or-buy decision in the presence of a rival: strategic outsourcing to a common supplier", *Management Science*, 54, 1747?1758.

Grossman, S. and Hart, O. (1980): "Takeover bids, the free-rider Problem, and the theory of the corporation", *Bell Journal of Economics*, 11 42-64.

Shleifer, A. and Vishny, R. (1986): "Large shareholders and corporate control", *Journal of Political Economy*, 94(3), 461-489.

4.8.3 Topics in Industrial Organisation: EC803

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course will deal with some recent developments in the field of Industrial Organisation theory. Keeping in view how the different market imperfections are created and perpetuated by firms in a modern economy, the course will study the following topics in particular, along with other recent developments.

- **Course Learning Outcomes** By the end of the course, the student will acquire a theoretical understanding of a variety of phenomena in industrial organisation and be prepared for research in this field.

- **Content : Unit-wise**

  1. Innovation and intellectual property rights:

     R&D race and innovation incentive, organisation of R&D, patent vs. trade secrecy, licensing and joint ventures.

  2. Bundling and tying:

     Economics of bundling and tying, strategic reasons and efficiencies, market structures and outcomes

  3. Competition with switching Costs, network effects and network standards:

     Consumer search, consumer inertia, competitive effects of switching cost, market with network goods, network effect, network effects and switching costs, markets for several network goods, oligopoly pricing and standardisation, strategies in standards wars.

  4. Product quality, reputation and advertising:

     Vertical product differentiation, quality choice, demand effect, advertising and competition, advertising and price signals, advertising and quality, informative and persuasive advertising.

  5. Markets with intermediated goods:

     Intermediaries as dealers, intermediaries as match-makers, intermediaries as two-sided platforms, intermediation and information, information overload, intermediation and reputation

  6. Public policies in network goods:

     Regulation, auction and auction markets.

- **Suggested Readings**

  Belleflamme, P. and Peitz, M.: *Industrial Organization: Markets and Strategies*, Cambridge University Press (2015)

  Tirole, J.: *The Theory of Industrial Organization*, MIT Press (1988)

  Shy, O.: *Industrial Organization: Theory and Applications*, MIT Press (1996)

  Armstrong, M. and Porter, R.: *Handbook of Industrial Organization, Vol. III*, North-Holland (2007)

4.8.4   Economics of Innovation: EC804

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  During last 40 years or so the Economics of Innovation has become an independent field of enquiry for the growth and development of society. The process of innovation is a

very complex phenomenon and thus, on the one hand, it requires proper organisational design to encourage and incentivise and on the other it requires awarding appropriate property rights for management and transfer of the innovation towards the greater social good. Technological progress is an endogenous process and largely determined by the interplay of different organisational and legal structures of an economy. The course will focus on various static and dynamic aspects of technology creation and technology transfer both from the theoretical and empirical perspective.

- **Course Learning Outcomes**

  The student will learn to think about technology and technological progress using the tools of economics. They will develop an understanding of what goes into the making of technological advancement and success for an economy.

- **Content : Unit-wise**

  1. Incentives and management of innovation
     - Intellectual property rights
     - Sequential and complementary innovation
     - Network effect and standards
  2. Patents and R&D:
     - Patents and litigation
     - Patent pool
     - R&D tournaments, race and R&D organisation
  3. Diffusion of Innovation
  4. Technology transfer and licensing
  5. Innovation and public policy.

- **Suggested Readings** Scotchmer, S.: *Innovation and Incentives*, MIT Press (2004)

  Swann, G.: *The Economics of Innovation: An Introduction*, Edward Elgar (2014)

  Hall, B. and Rosenberg, N.: *Handbook of the Economics of Innovation, Vols 1 & 2*, Elsevier (2010)

4.9 General

4.9.1 Ethics and Economics: EC901

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course is designed to highlight the relevance of moral concerns to the practice of both positive and normative economics. It will also sensitize students to the influence of economic theory and its tools on moral philosophy.

- **Course Learning Outcomes**

  Students will take away an understanding of, and ability to think about, fundamental categories such as rights, justice, equality, and their relationship to economics.

- **Content: Unit-wise**

  1. Introduction: The economic importance of morality; morality and economic outcomes; ethics and the market; economists and morality- an overview.
  2. Morality and economic rationality:
     Preferences vs. rights; preferences vs. rights vs. needs; norms and economic behavior; adaptive preferences.
  3. Morality and Welfare:
     The Pareto principle and its critics; outcomes vs. procedures. Liberty and rights.
  4. The doctrine of equality: types of equality; critics of equality.
  5. Theory of Justice.

- **Suggested Readings**

  Berlin, I.: *Four Essays on Liberty*, Oxford University Press (1969).

  Dworkin, R.: *Taking rights seriously*, Harvard University Press (1977).

  Elster, J.: *Sour Grapes: Studies in the Subversion of Rationality*, Cambridge University Press (1983).

  Nozick, R.: *Anarchy, State, and Utopia*, Basic Books (1974).

  Rawls, J.: *A Theory of Justice*, Harvard University Press (1982).

  Roemer, J.: *Free to Lose*, Harvard University Press (1972).

  Sen, A.: *On Ethics and Economics*, Blackwell (1987).

  Sen, A.: *Inequality Reexamined*, Harvard University Press (1992).

  Sen, A., and Williams, B. (eds.): *Utilitarianism and Beyond*, Cambridge University Press (1982).

4.9.2   Issues in Economic Systems and Institutions: EC902

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours.

- **Credits** : 5.

- **Course Objectives**

  Even relatively unregulated market economies do not operate in a vacuum. Transactions and contracts arise in a specific institutional setting, encompassing the legal and political system, corporate and social structure as well as cultural norms. Many relevant decisions are not mediated through a price system, e.g. allocations within a fi

  rm, verdicts delivered by a jury, job references provided by professors, etc. The way these systems and institutions are designed may affect resource allocation and outcomes significantly. The purpose of this course is to examine the linkage between institutions and economic performance.

- **Course Learning Outcomes**

  The student will learn to analyze seemingly somewhat disparate issues using a theoretical framework to study them. The main tool they will gain facility in, in doing so, is game theory, especially games of incomplete information.

- **Content: Unit-wise**

  1. Incentives and Motivation
  2. Communication
  3. Norms, Expectations and Coordination
  4. Information Aggregation
  5. Reputation
  6. History

- **Suggested Readings**

  The course is based on papers drawn from a variety of economic contexts. A sample follows.

  Holmstrom, B.: "Moral Hazard in Teams," *Bell Journal of Economics*, 1982. Vol 13(2), 324-40.

  Hermalin, B.: "Toward an Economic Theory of Leadership: Leading By Example," *American Economic Review*, 1998. Vol 88(5), 1188-1206.

  Benabou, R. and Tirole, J.: " Intrinsic and Extrinsic Motivation," *Review of Economic Studies*, 2003. Vol 70(3), 489-520.

  Crawford, V. and Sobel, J.: "Strategic Information Transmission," *Econometrica*, 1982. Vol 50(6), 1431-51.

  Greif, A.: "Contract Enforcability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition," *American Economic Review*, 1993. Vol 83(3), 525-48.

  Ghosh, P. and Ray, D.: "Cooperation in Community Interaction without Information Flows," *Review of Economic Studies*, 1996. Vol 63(3), 491-519.

  Morris, S. and Shin, H.: "Unique Equilibrium in a Model of Self-ful

filling Currency Attacks," *American Economic Review*, 1998. Vol 88(3), 587-97.

Morris, S.: "Political Correctness," *Journal of Political Economy*, 2001. Vol 109(2), 231 - 65.

Acemoglu, D., Johnson, S., Robinson, J.: "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review*, 2001. Vol 91(5), 1369-1401.

Banerjee, A. and Iyer, L.: "History, Institutions and Economic Performance: the Legacy of Colonial Land Tenure Systems in India," *American Economic Review*, 2005. Vol 95(4), 1190-1213.

4.9.3   Economics of Discrimination: EC903

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course familiarises students with theories and empirical tools to understand and measure economic discrimination based on social group identities, such as caste, race, gender, tribal status, ethnicity and so on. The course will also deal with policy options targeting group-based disparities and discrimination, with a focus on affirmative action policies. This component will outline the various types of affirmative action, including quotas or reservation, and discuss debates around affirmative action, focusing on evidence-based research gauging its impact.

- **Course Learning Outcomes**

  Students will develop an understanding of discrimination from economic and other perspectives, get a good handle on theoretical and empirical tools to study related research questions, and an appreciation of economic policy alternatives.

- **Content : Unit-wise**

  1. Theories:
     Statistical discrimination, taste for discrimination, signalling models.
  2. Overlap between economics of discrimination and related sub-disciplines:
     "Identity Economics", pioneered by George Akerlof and Rachel Kranton, "Feminist Economics" and "Stratification Economics".
  3. Empirical methods of estimating discrimination in market settings: decomposition techniques
  4. Experimental methods: both field-based as well as lab-based experiments to gauge discrimination outside the labour market.
  5. Affirmative action

- **Suggested Readings** Becker, G.: *Economics of Discrimination*, University of Chicago Press (1957)

  Loury, G.: *Anatomy of Racial Inequality*, Harvard University Press (2002)

  Thorat, S., and Newman, K.: *Blocked by Caste*, Oxford University Press (2010)

  Deshpande, A.: *Affirmative Action in India*, Oxford University Press (2013)

4.9.4 Political Economics: EC904

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course introduces students to the political economy of institutions and development. We explore the interrelation and interaction between state, power and economic outcomes. Lectures will mainly focus on theoretical framework. Empirical papers will be covered through class discussions and student presentations. As a supplement we may also read original texts on Liberalism and Marxism.

- **Course Leaning Outcomes** Students will develop an understanding of the interrelationships between institutions and development.

- **Content: Unit-wise**

  1. Democracy or dictatorship
  2. Political rent, corruption, cronyism
  3. Power of propertied classes in democracy
  4. Divide and rule
  5. Imperialism and colonialism
  6. Role of media and experts
  7. Collective action

- **Suggested Readings**

  Acemoglu, D.: Lecture Notes.
  http://economics.mit.edu/files/8753

  Persson, T. and Tabellini, G.: *Political Economics*, MIT Press (2000)

4.9.5   Behavioural Economics: EC905

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course will introduce the fast-evolving field of behavioural economics. This area has evolved through an interaction between experimental results (mostly from lab experiments, but also from field experiments) and the development of theory. While the evidence rejects some predictions of classical decision theory, it is yet to settle down on a firm alternative interpretation. Similarly, at present, there is often a multiplicity of theories to explain the evidence from behavioural experiments. Thus there is a good deal of leeway in the selection of material. The topics listed below are indicative and not meant to be comprehensive.

- **Course Learning Outcomes**

  Students would have learned the leading examples of departures in behaviour from that predicted by earlier economic theory, as well as the main models formulated to explain these departures.

- **Content : Unit-wise**

  1. Decision-making under risk and uncertainty.
  2. Reference dependence and loss aversion.
  3. Intertemporal decision-making.
  4. Social preferences.
  5. Behavioural game theory.
  6. Behavioural welfare economics.

- **Suggested Readings**

  Bernheim, B.D., DellaVigna, S., Laibson, D.: *Handbook of Behavioral Economics, Vol. 1*, North-Holland (2018)

  Bernheim, B.D., DellaVigna, S., Laibson, D.: *Handbook of Behavioral Economics, Vol. 2*, North-Holland (2019)

  Camerer, C.: *Behavioral Game Theory: Experiments in Strategic Interaction*, Princeton University Press (2003)

  Camerer, C., Loewenstein, G., Rabin, M.: *Advances in Behavioral Economics*, Princeton University Press (2004)

  Dhami, S.: *The Foundations of Behavioural Economic Analysis*, Oxford University Press (2016)

  Friedman, D., and Sunder, S.: *Experimental Methods: A Primer for Economists*, Cambridge University Press (1994)

4.9.6 Economics of Organisations: EC906

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  This course concerns the existence, nature, design and performance of organisations. It deals with co-ordination and interactions both within and across firms. In particular it will focus on decision-making in organisations, agency problems, social relations and contracts. The course would study in oligopolistic market environment the relevant issues from the perspective of internal organisation and interactions between firms. The foundation of the theory is based on empirical observations in different market contexts. Finally, the interplay of policy, institutions and organisations will be studied. This is an upcoming field and therefore the readings will be mostly from journal articles and the Handbook.

- **Course Learning Outcomes**

  By doing this course, students will extend their understanding of economics to how it impacts behaviour and outcomes within organisations.

- **Content : Unit-wise**

  1. Boundaries of firms: transaction cost economies, property rights and incentives
  2. Hierarchy, authority, leadership and efficiency
  3. Agency and incentive problems in organisational design
  4. Vertical and horizontal relations between firms
  5. Outsourcing and in-house productions
  6. Labour union and oligopolistic competition
  7. Delegation and incentives
  8. Formal and relational contracts between firms
  9. Research and development and technology transfer
  10. Corporate social responsibility
  11. Economics of non- profit organisations
  12. Lobbying and corruption
  13. Regulation and public policy.

- **Suggested Readings** Roberts, J, and Gibbons, R.: *The Handbook of Organizational Economics*, Princeton University Press (2012)

4.9.7   Health Economics: EC907

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Outline**

  This course analyses theoretical and empirical issues in health using economics tools, namely, microeconomics, game theory, behavioural economics and econometrics.

- **Course Learning Outcomes**

  1. A better understanding the economic theory of health and healthcare through a study of economic models of health, addiction, demand for healthcare and demand for insurance.
  2. Learn to evaluate and interpret empirical findings in health economics.

- **Content : Unit-wise**

  1. Introduction to health economics: the economic way of thinking about health; health measurement, determinants and long run trends; health and socioeconomic status.
  2. Economic models of health
  3. Health Insurance: introduction and moral hazard; adverse selection in health insurance; social insurance in India and global examples.
  4. The behavioural economics of health; unhealthy behaviour-evidence and policy issues.
  5. Health and economic development
  6. Health valuation: mortality risk valuation?static model, life cycle model, empirical models (hedonic wages, stated preference); valuing changes in morbidity-model of health production, revealed preference and stated preference approaches, quality adjusted life years.
  7. Externalities and public health: air pollution, pandemics.

- **Suggested Readings**

  Bhattacharya, J., Hyde, T. and Tu, P.: *Health Economics*, Palgrave (2013).

  Grossman, Michael (1972): "On the Concept of Health Capital and the Demand for Health", *Journal of Political Economy* 80(2).

  Case, A., Lubotsky, D., and Paxson, C. (2002): "Economic Status and Health in Childhood: The Origins of the Gradient", *American Economic Review*. 92(5): 1308-34.

  Becker, G., and Murphy, K. (1988): "A Theory of Rational Addiction", *Journal of Political Economy* 96(4):675-700.

Bhattacharya, J.; Goldman, D. and Sood, N. (2009): "Market Evidence of Misperceived Prices and Mistaken Mortality Risks", *Journal of Economic Behavior and Organization* 72(1):451-62.

Acemoglu, D. and Johnson, S. (2007: "Disease and Development: The Effect of Life Expectancy on Economic Growth", *Journal of Political Economy*, 115(6): 925-85.

Miguel, E., and Kremer, M. (2004): "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities", *Econometrica*, 72(1): 159-217.

Articles from journals and working papers.

4.9.8 Labour Economics: EC908

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 5 hours

- **Credits** : 5

- **Course Objectives**

  The objective of this course is to introduce the student to labour economics with an emphasis on microeconomic theory and empirics. The material covered would help the student to understand real world issues pertaining to labour markets and also to assess related public policy measures.

- **Course Learning Outcomes** The student will learn basic economic forces behind employment and wages, sources of labour market imperfections, driving forces for education and skill upgradation, discrimination among the workers and public polices for labour welfare.

- **Content : Unit-wise**

  1. Labour Supply:
     Choice between Consumption and Leisure; Incorporating Household Production and Decisions.

  2. Labour Demand and Equilibrium:
     Labour Demand Function, Competitive Equilibrium, Compensating Wage Differentials and Hedonic Theory of Wages

  3. Investment in Education:
     Theory of Human Capital, Education as a Signalling Device, Returns to Education

  4. Job Search

  5. Discrimination
     Theories of Discrimination, Measuring Discrimination, Affirmative Action

  6. Labour Market Institutions and Policies
     Collective Bargaining and Labour Unions, Minimum Wage and Employment, Unemployment Insurance, Job security regulations

  7. Incentives, Agency and Efficiency Wages

  8. Migration

- **Suggested Readings**

  Cahuc, P.; Carcillo, S. and Zylberberg, A. (2014): *Labor Economics*, MIT Press

  Ehrenberg, R. G. and Smith, R. S.(2018): *Modern Labor Economics: Theory and Public Policy*, Routledge

  Borjas, G. J. (2010): *Labor Economics*, McGraw-Hill/Irwin, Boston MA (5th edition).

  Card, D., and Ashebfelrer, O. (2011): Handbook of Labor Economics, Vol 4A & B, Elsevier

  Articles from journals and working papers.

4.10   Open Electives

The department will offer one of following courses in each semester as an open elective course.

4.10.1   Mathematical Economics: EC1001

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 4 hours.

- **Credits** : 4.

- **Course Objectives**

  This course is designed for students who plan to do further graduate level work in economic theory, especially those with a keen interest in creating, as opposed to consuming, pure theory.

- **Course Learning Outcomes** The course aims for students to learn the following: (1) a rigorous exposure to a selection of basic mathematical tools that are used by economic theorists, and (2) applications of these methods to some areas of economic theory including duality theory, game theory, the Arrow-Debreu model and comparative statics.

- **Content: Unit-wise**

  1. Set theory and preliminaries
  2. Topological Spaces:
     Metric spaces, topological spaces and continuous functions; various useful constructions, e.g., projective and inductive topologies
     Countability and separability properties
     Compactness, completeness, connectedness, etc.

Topologies on function spaces; linear spaces, weak topologies; topologies on space of probability measures

Convex analysis; separation theorems

Set-valued mappings, fixed point theorems

3. Arrow-Debreu model: existence and optimality

4. Debreu-Scarf theorem

5. Duality theory

6. Nash's existence theorem

- **Suggested Readings**

Aliprantis, C., Brown, D. and Burkinshaw, O. (1990): *Existence and Optimality of Competitive Equilibria*, Springer-Verlag.

Berge, C. (1963): *Topological Spaces*, Macmillan.

Debreu, G. (1959): *Theory of Value*, Yale University Press.

Hildenbrand, W. and Kirman, A. (1988): *Equilibrium Analysis*, North-Holland (1988).

Munkres, J. (1975): *Topology: A First Course*, Prentice-Hall.

4.10.2 Macroeconomics of Development: EC1002

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 4 hours.

- **Credits** : 4.

- **Course Objectives**

The course is motivated by two fundamental queries: (i) What explains the vast divergence in growth patterns across the world? (ii) What is an appropriate government policy (if any) in a low income-low growth country which can usher in a "high growth" regime? Modern growth theory has moved beyond the neoclassical framework to provide answers to these set of questions. This course takes a closer look at these alternative theories.

- **Course Learning Outcomes**

This course will enable students to understand, evaluate and compare various policies that promote growth. It will also help them understand the deeper institutional and cultural characteristics that might be the root cause of underdevelopment in many poor countries.

- **Content: Unit-wise**

1. Proximate Causes of Growth:

   (a) Human Capital: The Ben Porath model of human capital accumulation; The Nelson-Phelps model of skill-technology complementarity.

   (b) Technology: Distance to the frontier and technology diffusion; Directed technological change; Appropriate versus inappropriate technologies.

2. Deeper Causes of Growth:

   (a) Imperfect Markets: Credit Market Imperfection and Indivisibility of investment; Risk, diversification and financial institutions.

   (b) Political Economy: Inequality, Taxation and Growth; Democracy versus Oligarchy.

   (c) History versus Expectations: Underdevelopment as coordination failure; Multiple equilibria in technology adoption.

- **Suggested Readings**

  This course is primarily based on journal articles too numerous to list here. A broad overview of the topics can be found in the following text books:

  Acemoglu, D. (2009): *Introduction to Modern Economic Growth*, Princeton University Press

  Aghion, P. and Howitt, P. (2009): *The Economics of Growth*, MIT Press

  A few representative articles are listed:

  Acemoglu, Daron (2002): "Directed Technical Change." Review of Economic Studies 69: 781–809.

  Acemoglu, Daron, and Zilibotti, Fabrizio (1997) "Was Prometheus Unbound by Chance? Risk, Diversification and Growth." Journal of Political Economy 105: 709–751.

  Adsera, Alicia and Ray, Debraj (1998) "History and Coordination Failure", Journal of Economic Growth 3(3) 267–276.

  Alesina, Alberto, and Rodrik, Dani (1994) "Distributive Politics and Economic Growth." Quarterly Journal of Economics 109: 465–490.

  Ben-Porath, Yoram (1967) "The Production of Human Capital and the Life Cycle of Earnings." Journal of Political Economy 75: 352–365.

  Doepke, Matthias and Zilibotti, Fabrizio (2008), "Occupational Choice and the Spirit of Capitalism", The Quarterly Journal of Economics, 123 (2), 747–793.

  Galor, Oded and Zeira, Joseph (1993), "Income Distribution and Macroeconomics." Review of Economic Studies 60: 35–52.

  Greenwood, Jeremy and Smith, Bruce (1997), "Financial markets in development, and the development of financial markets", *Journal of Economic Dynamics and Control*, 1997, 21(1), 145-181

  Nelson, Richard R.,and Edmund S. Phelps (1966): "Investment in Humans, Technological Diffusion,and Economic Growth." American Economic Review 56: 69–75.

4.10.3   Public Economics: EC1003

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 4 hours.

- **Credits** : 4.

- **Course Objectives**

  Public Economics is a large and rapidly expanding field of research. It is concerned with normative and positive aspects of a government's activities in an economy. Normative analysis is concerned with how a government should behave to improve social welfare and positive analysis studies the implications of government activities on the behavior of individuals and communities. Governments intervene through regulation, taxation, redistributive transfers, and the provision and production of private and public goods. This course will focus on public spending on public goods, regulation in the presence of externalities and redistributive policy. It will cover important theoretical results in the field and a number of case studies from across the world.

- **Course Learning Outcomes**

  By the end of the course, students will be familiar with important theoretical results in this area and with empirical trends in public spending across the world. They will also be guided in developing their writing skills to express ideas within this field to popular readers.

- **Content: Unit-wise**

  1. The emergence of a social state:
     The evolution of social spending across the world since the early twentieth century.
  2. Efficiency in the provision of public goods:
     The types and quantities of public goods that should be provided.
  3. Externalities and their regulation:
     Sources of externalities, their relationship to contracts and markets and their regulation.
  4. Preference Aggregation and Public debate:
     How do we determine provision when we do not know preferences? Voting and other forms of information aggregate in democracies.

- **Suggested Readings**

  Anthony Atkinson and Joseph E Stiglitz: *Lectures on public economics*, Princeton University Press (2015)

  Peter Lindert: *Growing public: Volume 1, the story: Social spending and economic growth since the eighteenth century*, Cambridge University Press (2006)

  Glenn Loury (1994): Self-censorship in public discourse: a theory of political correctness and related phenomena. *Rationality and Society* 6(4), 428 – 461

Robert Nozick: *Anarchy, state, and utopia*, Basic books (2013)

Thomas Piketty: *Capital in the 21st century*, Cambridge: Harvard University Press (2014)

J. Rawls: *Justice as fairness: A restatement*, Harvard University Press (2001)

J. Roemer: *Equality of opportunity*, Harvard University Press (2009)

4.10.4   Environmental Economics: EC1004

- **Marks**: Assignments - 30, Exam - 70

- **Duration (per week)**: 4 hours.

- **Credits** : 4.

- **Course Objectives**

  The objective of this course is to present an economic approach to environmental problems such as air and water pollution. Alternative methods of addressing pollution, namely, direct regulation and market based instruments (taxes and tradable permits) are compared and contrasted, especially in the presence of asymmetric information. This is followed by techniques for measuring the benefits of environmental improvements and their applications.

- **Course Learning Outcomes**

  A logical, coherent and sensible understanding of the reasons for (and solutions to) environmental problems. In particular, an ability to apply economic theory to environmental issues with a view to developing effective and rational environmental policies.

- **Course Content: Unit-wise**

  1. Externalities and public goods
  2. Corrective mechanisms (taxes, subsidies, permits)
  3. Regulation with moral hazard and adverse selection
  4. Valuation of non-market goods and amenities: overview and basic theory.
  5. Revealed preference (indirect market methods); health valuation; constructed markets (direct market methods).

- **Suggested Readings**

  Phaneuf and Requate: *A Course in Environmental Economics: Theory, Policy and Practice*, Cambridge University Press (2017)

  Freeman, Herriges and Kling: *The Measurement of Environmental and Resource Values: Theory and Methods*, 3rd ed. RFF Press/Routledge (2014)

  W. Baumol, W. Oates: The Theory of Environmental Policy. Cambridge University Press (1988)

Champ, Boyle and Brown: *A Primer on Nonmarket Valuation.* Springer (2003)

Articles from journals and working papers.

UNIVERSITY OF DELHI

MASTER OF COMMERCE
(M.COM)
(To be effective from Academic Year 2014-15 and onwards)

Syllabus

M.Com. Revised Syllabus as approved by Academic Council on 21st June, 2014 and Executive Council on 19th July, 2014

CONTENTS

I. PREAMBLE

The Department of Commerce was established in 1967 with the renowned flagship post-graduate programme-Masters in Commerce (M.Com). Apart from the other post-graduate and research courses M.Com is the most exalted two year full time post-graduate programme in commerce. The course provides an extreme and rigorous base for teaching, research and allied business administration. The programme is well received in the industry and for years had been serving the needs of managerial cadre in Indian Inc. The course serves the needs of academics and prepares students for research and teaching. The Alumni of this course are well placed in business, academics and administration in the country as well as abroad.

In the year 2009, this course was changed from annualized to semester mode dividing the whole course into 4 semesters. During the semesterization of the course, the then existing curriculum (annual mode) was adopted for semester mode, without any change. Moreover, in the light of augmentation in the field of commerce and business, the syllabi have not been updated since long. Thus, in view of widening the scope and depth of the course and inclusion of research paradigms of commerce stream, the overall structure of the course has been changed. Further, the overall structure has been improved to provide an insight of research in commerce and interdisciplinary areas and to facilitate those students aspiring for direct Ph.D. admissions.

In order to facilitate the course revision process, the Departmental Council constituted a Committee which proposed various changes in the structure and content of the course. The committee met about half a dozen times in order to improve and create the new structure and discussed numerous propositions threadbare. Further, a special meeting was arranged with the alumni of the department, who are well placed in industrial sector to seek their valuable inputs for the curriculum. The structure was then presented in and approved by the Department council along with the names of various area convenors as per their specialization for the formulation of course contents. The proposed structure was then vetted by an external member expert committee and their suggestions were incorporated before finalizing the proposed structure. The contents were decided by the working groups formed for various specialized areas such as Finance, Accounting, Marketing, Human Resource and OB, Laws, Economics, etc. The working groups in consultation with the respective convenors proposed the course contents which was presented in the Committee of Courses (Hons., P.G. and Research) meeting held on 5th May, 2014. The Committee of Courses discussed the structure and contents, threadbare and suggested a few changes. After incorporating the changes suggested by Committee of Courses, the draft was then placed for discussion in the Faculty of Commerce and Business. The changes recommended by Faculty of Commerce and Business were adopted and the syllabus was approved in the meeting held on 10th May, 2014. Further, in the Standing Committee meeting on academic affairs held on 20th June, 2014, Academic Council meeting held on 21st June, 2014 and Executive Council meeting held on 19th July, 2014 the syllabus was approved for its course contents.

As per the new structure, there are 5 papers in each semester. In the second year, there are 2 compulsory papers in each semester. As per the area of interest, the students are required to choose two optional groups- one major group and one minor group, in the beginning of 2nd year. The major group shall consist of 4 papers and minor group of 2 papers to be studied in 3rd and 4th semester. The structure for the groups has been designed with intent to provide advanced level specialization in the respective field.

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II: M.Com. Programme Structure

AFFILIATION

The programme shall be governed by the Department of Commerce, Faculty of Commerce and Business, University of Delhi, Delhi – 110007

Programme Structure

The M.Com. Programme is divided into two parts as under. Each Part will consist of two semesters.

		Semester	*Semester*
Part - I	First Year	Semester I	Semester II
Part – II	Second Year	Semester III	Semester IV

* There will be 4 lecture hours of teaching per week for each paper
* Duration of examination of each paper shall be 3 hours.
* Each paper will be of 100 marks out of which 70 marks shall be allocated for semester examination and 30 marks for internal assessment.

The schedule of papers prescribed for various semesters shall be as follows:

Part I: Semester I

PAPERS		Marks		Total Marks	Duration (Hrs.)	Credit (Hrs.)
Paper No.	Title	Written	Internal Assessment			
4101	Business Statistics	70	30	100	3	4
4102	Managerial Economics	70	30	100	3	4
4103	Managerial Accounting	70	30	100	3	4
4104	Financial Planning	70	30	100	3	4
4105	Organisational Theory and Behaviour	70	30	100	3	4
			TOTAL	500		20

Part I: Semester II

PAPERS		Marks		Total Marks	Duration (Hrs.)	Credit (Hrs.)
Paper No.	Title	Written	Internal Assessment			
4201	Quantitative Techniques for Business	70	30	100	3	4
4202	Financial management and Policy	70	30	100	3	4
4203	Marketing Management	70	30	100	3	4
4204	Legal Aspects of Business	70	30	100	3	4
4205	International Business	70	30	100	3	4
			TOTAL	500		20

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Part II: Semester III

PAPERS		Marks		Total Marks	Duration (Hrs.)	Credit (Hrs.)
Paper No.	Title	Written	Internal Assessment			
4301	Global Strategic Management	70	30	100	3	4
4302	Entrepreneurship	70	30	100	3	4
-----	Major Group (Paper 1)	70	30	100	3	4
-----	Major Group (Paper 2)	70	30	100	3	4
------	Minor Group (Paper 1)	70	30	100	3	4
			TOTAL	**500**		**20**

Part II: Semester IV

PAPERS		Marks		Total Marks	Duration (Hrs.)	Credit (Hrs.)
Paper No.	Title	Written	Internal Assessment			
4401	Corporate Governance, Ethics and Social Responsibility of Business	70	30	100	3	4
4402	Business Research	70	30	100	3	4
-----	Major Group (Paper 3)	70	30	100	3	4
-----	Major Group (Paper 4)	70	30	100	3	4
------	Minor Group (Paper 2)	70	30	100	3	4
			TOTAL	**500**		**20**
		GRAND TOTAL (4 Semesters)		**2000**		**80**

Elective Groups

Two groups (one Major and one Minor) from the available electives are to be selected at the commencement of M. Com. Part II - Semester III.

Notes:

1. The elective groups in the Semester IV will remain the same as the ones selected in Semester III.
2. Once a group has been selected, no change in selected groups will be allowed later.
3. While the first two papers of selected major group and first paper of selected minor group will be taught in Semester III, the next two papers of selected major group and second paper of selected minor group will be taught in Semester IV.

List of Elective Groups

The Department will announce in the beginning of the respective semester, the list of elective groups which will be offered during the semester depending upon the availability faculty members and the demand of electives.

Group A: Finance

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Paper MJ301: Financial Institutions and Markets
Paper MJ302: Security Analysis and Portfolio Management
Paper MJ403: International Financial System
Paper MJ404: International Financial Management

Group B: Marketing
Paper MJ311: International Marketing
Paper MJ312: Advertising and Sales Management
Paper MJ413: Consumer Behaviour
Paper MJ414: Supply Chain Management and Logistics

Group C: Human Resource Management
Paper MJ321: Human Resource Development
Paper MJ322: Management of Industrial Relations
Paper MJ423: Strategic Human Resource Management
Paper MJ424: Compensation Management and Employee Welfare Laws

Minor Groups
Group A: Taxation
Paper MN331: Principles and Practice of Taxation and Indian Tax System
Paper MN432: Corporate Tax Structure and Planning

Group B: Law
Paper MN341: Corporate Law
Paper MN442: Industrial Law

Group C: Accounting
Paper MN351: Strategic Cost Management
Paper MN452: Accounting Theory and Financial Reporting

Group D: International Business
Paper MN361: India's Foreign Trade and Investment
Paper MN462: Management of International Business Operation

Teaching
The faculty of the Department is primarily responsible for organizing lecture work for M.Com. The instructions related to tutorials are provided by the respective registering units under the overall guidance of the Department. Faculty from some other Departments and constituent colleges are also associated with lecture and tutorial work in the Department.

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III. Scheme of Examinations

1. English shall be the medium of instruction and examination.

2. Examinations shall be conducted at the end of each Semester as per the Academic Calendar notified by the University of Delhi

3. The system of evaluation shall be as follows:

   3.1 Each paper will carry 100 marks, of which 30 marks shall be reserved for internal assessment based on a combination of tutorials, classroom participation, project work, seminar, term papers, tests, and attendance. The weightage given to each of these components in a combination shall be decided and announced at the beginning of the semester by the Department in consultation with the teachers. The system so decided will be communicated by the Department to respective colleges.

   3.2 The remaining 70 marks in each paper shall be awarded on the basis of a written examination at the end of each semester. The duration of written exanimation for each paper shall be three hours.

4. Examinations for courses shall be conducted only in the respective odd and even Semesters as per the Scheme of Examinations. Regular as well as ex-students shall be permitted to appear/reappear/improve in courses of Odd Semesters only at the end of Odd Semester and courses of Even Semesters only at the end of Even Semesters.

❖ **Pass Percentage & Promotion Criteria**

   a. The minimum marks required to pass any paper in a semester shall be 40% in each paper and 40% in aggregate of a semester.

   However, a candidate who has secured the minimum marks to pass in each paper but has not secured the minimum marks to pass in aggregate may reappear in any of the paper/s of his choice in the concerned semester in order to be able to secure the minimum marks prescribed to pass the semester in aggregate.

   No student would be allowed to avail of more than 3 chances to pass any paper inclusive of first attempt.

   b. **Semester to Semester Promotion:** Students shall be required to fulfil the Part to Part promotion criteria. Within the same Part, students shall be allowed to be promoted from a semester to the next semester, provided s/he has passed at least half of the courses of the current semester.

   Part I to Part II Promotion: Admission to Part- II of the Programme shall be open to only those students who have successfully passed at least 75% papers offered for the Pat-I courses comprising of I and II Semester taken together. However, he/she will have to clear the remaining papers while studying in the 2nd year of the programme.

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c. Students who do not fulfil the promotion criteria (c) above shall be declared failed in the Part concerned. However, they shall have the option to retain the marks in the papers in which they have secured Pass marks as per Clause (a) above.

d. A student who has to reappear in a paper prescribed for Semester I/III may do so only in the odd Semester examinations to be held in November/December. A student who has to reappear in a paper prescribed for Semester II/IV may do so only in the even Semester examinations to be held in April/May.

❖ **Division Criteria**

Successful candidates will be classified on the basis of the combined results of Part-I and Part-II examinations as follows:
Candidates securing **60% and above**: I Division
Candidates securing **50% or more but less than 60%**: II Division
Candidates securing **40% or more but less than 50%**: III Division

❖ **Span Period**

No student shall be admitted as a candidate for the examination for any of the Parts/Semesters after the lapse of **four** years from the date of admission to the Part-I/Semester-I of the M. Com. Programme.

❖ **Attendance Requirement**

Attendance in tutorials, seminars etc. arranged by the Department/ College from time to time, is mandatory according to the Internal Assessment requirement as per University rules.

Guidelines for Award of Internal Assessment Marks for the M.Com course (Semester)

As per the decision of Department Council meeting held on 27th July, 2009, the following are the guidelines for the award of Internal Assessment marks to the students admitted to M.Com Semester-based Course Scheme:-

❖ For each paper, there are 30 marks allocated for internal assessment and 70 marks for the Annual Examination. Out of 30 marks allocated for internal assessment for each paper:

- 20 marks are to be assigned for class test
- 5 marks are to be assigned for assignment
- 5 marks are to be assigned for attendance

❖ A class test of 20 marks in each paper will be conducted by the teachers teaching the paper at the Department of Commerce. The date and time of the class test will be notified to the students by the respective teachers-in-charge of (M.Com) course at the Department of

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Commerce.

❖ Five marks are to be awarded for assignment based work by the college/institution where the students are enrolled. The marks to be awarded on the basis of student's performance in any one or combination of assignments/activities such as presentation, participation in seminar/workshop, case study discussion, and submission of written assignments as part of their continuous evaluation. The composition of assignments/activities for each paper will be decided by the concerned college/ institution in advance and will be notified to the students.

❖ Five marks are to be awarded for attendance in the assignment/activities mentioned above by the college/institution where students are enrolled. The marks shall be awarded on the basis of existing norms for award of marks for attendance as per the Internal Assessment Scheme of University. The marks for attendance shall be as follows:

i)	**More than 67% but less than 70%**	**1 Marks**
ii)	**70% or more but less than 75%**	**2 Marks**
iii)	**75% or more but less than 80%**	**3 Marks**
iv)	**80% or more but less than 85%**	**4 Marks**
v)	**85% and above**	**5 Marks**

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IV: COURSE CONTENTS AND READING LISTS OF M.COM. PROGRAMME

Master of Commerce
Semester I

Course 4101: BUSINESS STATISTICS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of this paper is to equip students with some of the important statistical techniques for managerial decision making and to provide ground for learning advanced analytical tools used in research.

Contents:
Unit I: Theory of Probability and Probability Distributions: Approaches to calculation of probability. Marginal, joint and conditional probabilities. Probability rules. Bayes' theorem.
Expected value and standard deviation of a probability distribution. Standard probability distributions - Binomial, Poisson, Hypergeometric, and Normal.

Unit II: Statistical Decision Theory: Decision-making process. Payoff and Regret tables. Decision rules under risk and uncertainty. Expected value approach and EVPI. Marginal analysis. Decision-tree analysis.

Unit III: Sampling Distributions and Estimation: Sampling concepts. Sampling methods. Concept of sampling distribution, its expected value and standard error. Sampling distribution of means and Central Limit Theorem. Sampling distribution of proportions.
Point and interval estimation; Properties of a good estimator. Confidence intervals for means (a) when σ is known, and (b) when σ is not known. Sample size determination for a mean. Confidence intervals for proportions.

Unit IV: Hypothesis Testing: One and Two-sample Tests: General methodology of hypothesis testing. One and two-tailed tests. Type I and type II Errors. Power of a test. Calculation and use of *p*-value.
One Sample Tests: Hypothesis testing of means when the population standard deviation is known and when it is not known. Hypothesis tests concerning proportions.
Two-sample Tests: Tests for difference between means – when population standard deviations are known, and when they are not known. Inferences about difference between two means for matched samples. Testing of difference between two proportions.

Unit V: Analysis of Variance and Non-parametric Tests: F-test of equality of variances. One-factor ANOVA (Completely Randomised Model) and Two-factor ANOVA without replication (Randomised Block Model).. Chi – square test for Independence and for Goodness-of-fit. Sign test, One-sample runs test and Rank correlation test.

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Unit VI: Correlation and Regression Analysis: Simple, multiple and partial correlation analysis. Rank correlation. Simple and Multiple linear regression analysis (involving up to three variables). Multiple regression analysis using MS Excel.

Suggested Readings:

1.Levin, R.I. and D.S. Rubin, *Statistics for Management*, Prentice-Hall of India.
2.Aczel, Amir D., and Sounderpandian, J., *Complete Business Statistics*, Tata McGraw Hill Publishing.
3.Anderson, Sweeny and Williams, *Statistics for Business and Economics*, CENGAGE Learning, New Delhi
4.Kazmeir Leonard J., *Business Statistics*, Tata McGraw Hill Publishing Company, New Delhi
5.Vohra, N. D., *Business Statistics*, Tata McGraw Hill Publishing Company, New Delhi
6.Freund, J. E. And F. J. Williams, *Elementary Business Statistics – The Modern Approach*, Prentice Hall of India Private Ltd., New Delhi.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester I

Course 4102: MANAGERIAL ECONOMICS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of the course is to acquaint students with the basic principles of micro and macro-economics for developing the understanding of theory of the firm, markets and the macro environment, which would help them in managerial decision making processes.

Contents:
Part A: Firm and Market
Unit I: Demand and The Firm: Consumer Behaviour: Cardinal and ordinal approaches to the derivation of the demand function. Revealed preference approach. Theory of attributes – Demand for consumer durables. Firm Theory: Objectives of the firm; Theory of the growth of the firm: Marris and Penrose.

Unit II: Production and Cost: Production: Law of variable proportion. Returns to scale. Production function: Concept of productivity and technology. Producer's Equilibrium. Isoquants ridge lines, Isoclines, Isocost lines. Cost function: Classification of costs, Short run cost functions, Relationship between return to scale and return to a factor, Long run cost functions.

Unit III: Market and Pricing: Market forms: AR-MR. Price taker; Monopoly power. Oligopolistic behavior: Cournot and Stackelberg models. Factor Pricing: Demand and supply of factors of production. Euler's theorem.

Part B: Macroeconomic environment

Unit IV: Product and Asset Market Equilibrium: Product Market: Derivation of IS function. Demand for real cash balances: Tobin's Portfolio theory. Endogenous money supply and Asset market equilibrium. Derivation of real LM function. Real IS-LM framework.

Unit V: Aggregate Demand and Aggregate Supply: Modern aggregate demand function. Demand Management. Philips Curve. Aggregate supply and the price level.

Unit VI: Trade Cycles and The Open Economy: Real Business Cycles. Exchange rate, trade balance, net saving, Macroeconomic movements in an open economy.

Suggested Reading:
1. Koutsyiannis, A., *Modern Microeconomics*, Macmillan Press Ltd.
2. Varian, *Micro-Economic Analysis* , Norton.
3. Pindyck Robert S., Daniel L. Rubinfeld and Prem L. Mehta, *Micro Economics*, Pearson Education Asia, New Delhi.

4. Branson William H., *Macro Economics Theory and Policy*, First East – West Press.

5. Dornbusch, R. and S. Fischer *Macro Economics* , Publisher Tata McGraw Hill.

6. Oliver Blanchard *Macro Economics,* Pearson Education, LPE.

7. Mankiw, N. Gregory, *Macro Economics,* Macmillan.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester I

Course 4103: MANAGERIAL ACCOUNTING

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of the course is to enable students to acquire knowledge of concepts, methods and techniques of management accounting and to make the students develop competence with their usage in managerial decision making and control.

Contents:
Unit I: Management Accounting – Nature and Functions; Financial vs. Management Accounting; Cost vs. Management Accounting; Role of Management Accountant.
Cost Concepts and Classifications.

Unit II: Activity Based Costing (ABC) – Concept and uses; Flow of Costs in ABC; Emerging Costing Approaches; Traditional Costing System vs. ABC.

Unit III: Variable and Absorption Costing - Concept, Comparison, Applications of Variable Costing, Preparation of Income Statements.
Cost-Volume-Profit (CVP) Analysis - Contribution Margin; Break – Even Analysis; Profit Volume (P/V) Analysis; Multiple-Product Analysis; Optimal use of Limited Resources.

Unit IV: Relevant Information and Short-Run Managerial Decisions – Managerial Decision Making; Decision Making Process; Differential Analysis; Types of Managerial Decisions – Make/Buy, Add/Drop, Sell/ Process Further, Operate/Shutdown, Special Order, Product-Mix, Pricing Decisions.

Unit V: Budgeting – Nature and functions; Preparation of Different Types of Budgets, Fixed Versus Flexible Budgeting.
Standard Costing – Concept, Advantages; Types of Standards; Variance Analysis; Materials, Labour, Overhead; Managerial Uses of Variances.

Unit VI: Responsibility Accounting and Divisional Performance Measurement – Advantages and Disadvantages of Divisionalisation; Concept of Responsibility Accounting; Responsibility Centres – Cost Centre, Revenue Centre, Profit Centre, Investment Centre, Responsibility Performance Reporting, Financial Measures of Performance, Non- Financial Performance Measures.
Transfer Pricing: Concept; Objectives; requisites; Methods of Transfer Pricing; Transfer Pricing in Multinational Companies.

Performance Measurement: Traditional Performance Measures; Balanced Scorecard- Meaning, Perspectives in Balanced Scorecard, Weighting Performance Measures; Requisites of Balanced Scorecard.

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Suggested Readings:

1. Atkinson Anthony A., Rajiv D. Banker, Robert Kaplan and S. Mark Young, *Management Accounting,* Prentice Hall.
2. Horngreen Charles T., and Gary L. Sundem and William O. Stratton, *Introduction to Management Accounting*, Prentice Hall of India.
3. Drury Colin, *Management and Cost Accounting*, Thomson Learning.
4. Garison R.H. and E.W. Noreen, *Managerial Accounting*, McGraw Hill.
5. Ronald W. Hilton, Managerial Accounting, McGraw Hill Education.
6. Jawahar Lal, Advanced Management Accounting, Text, Problems and Cases, S.Chand & Co., New Delhi.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester I

Course 4104: FINANCIAL PLANNING

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: *The objective of this course is to acquaint the students with essentials of finance so that they have requisite knowledge, skills and confidence to take charge of their financial future. Further, this paper intends to foster critical thinking skills for personal financial planning and handling financial market constraints.*

Contents:
Unit I: Introduction to Financial Planning: Globally accepted six steps financial planning process; General principles of cash flow planning, budgeting, legal aspects of financial planning. Overview of risk management: investments, insurance, retirement solutions, tax and estate planning.

Unit II: Investment Environment: Types of investment options available to an individual investor - bonds, equity shares, mutual funds, fixed deposits, PPF, financial derivatives, commodity derivatives, gold and bullion, ETFs, REITs, real estate etc. Objectives and rewards of investing. Investment constraints (tax considerations, unique needs etc.). Impact of inflation and indexation. Sources of financial information. Understanding mutual funds (Schemes, NAV calculation, load structure, Systematic Investment Plans, Systematic withdrawal plan etc.)

Unit III: Return-Risk Assessment: Risk aversion and risk profiling. Concept, types and calculation of returns. Assessment of risks in various financial instruments. Power of compounding and Time value of money. Rupee cost averaging. Concept of Portfolio and Diversification. Basics of Portfolio risk and return (two assets case). Tactical and strategic asset allocation.

Unit IV: Personal Financial Planning: Personal financial planning process. Setting personal financial goals. Life cycle approach to financial planning. Components of financial plan; developing financial plan; Using time value concept to estimate savings. Evaluation of tax saving instruments. Objectives of will and creating a valid will; living will and power of attorney. Planning for life insurance and health insurance. Primary clauses in Insurance agreement. Main contents of healthcare insurance.

Unit V: Credit Planning and Retirement Planning: Assessment of credit - types, advantages, disadvantages. Consumer and housing finance planning. EMI calculations - methods and implications. Reverse mortgage. Education loan. Credit card management; credit limits, overdraft protection, grace period. Credit Bureaus - individual credit history and ranking, identity theft and protection against identity thefts. Retirement planning and pension plans. Impact of taxes and inflation.

Unit VI: Investor Protection: Role of SEBI. Investor grievances and redressal system in India.

Note: Some case studies on the above topics are required to be discussed.

Suggested Readings:

1. Madura, Jeff, *Personal Finance,* Pearson.
2. Kapoor, J R, Dlabay & Hughes R, *Personal Finance,* McGraw Hill.
3. Keown, A J, *Personal Finance – Turning money into wealth,* Pearson Publication.
4. Bajtelsmit, Vickie L. & Rastelli Linda G., *Wiley Pathways Personal Finance*, Wiley.
5. Rachel Siegel & Carol Yacht, *Personal Finance,* Saylor Foundation, Flat World Knowledge.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester I

Course 4105: ORGANISATIONAL THEORY AND BEHAVIOUR

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of the course is to enable students to develop a theoretical understanding about organisation structure and its behaviour over time. The course will also make them capable of realizing the competitiveness for firms.

Contents:
Unit I- Conceptual Foundations of Organisation Theory and Behaviour: Organisational Theories - Classical, Neo-classical and Contemporary; Authority, Power, status, formal and informal structure; Bureaucratic structure; Boundary Less organisation; Flat and Tall structures; Impact of Environment on Organisational Design .
Organisational Behaviour (OB)- concept, determinants, models; challenges and opportunities of OB; Transaction cost; Disciplines contributing to the field of OB; Individual Behaviour- Foundations of individual behaviour, values, attitudes, personality, and emotions ; Perceptual process and Learning ; Management assumptions about people-McGregor's Theory X and Theory Y, Chris Argyris behaviour patterns.

Unit II- Group Decision making and Communication: Concept and nature of decision making process; Individual versus group decision making; Nominal group technique and Delphi technique; communication effectiveness in organisations; Feedback, Improving Inter-personal Communication- Transactional Analysis and Johari Window.

Unit III- Motivation: Content Theories- Maslow's Need Hierarchy, Herzberg's Two factor theory; Contemporary theories of motivation (ERG, Cognitive evaluation, goal setting, equity, Intrinsic Motivation Theory by Ken Thomas), expectancy model; Behaviour modification; Motivation and organisational effectiveness.

Unit IV - Leadership, Power and Conflict: Concept and theories of leadership- Behavioural approach, Situational approach, Leadership effectiveness; Leadership across cultures; Power- Bases of Power, power tactics; Conflicts- sources, patterns, levels and strategies.

Unit V- Organisational Culture, Organisational Development and Stress Management: Concept and determinants of organisational culture, creating sustaining and changing organisational culture. Managing misbehaviour at work- Aggression and Violence, Sexual abuse, Substance abuse, Cyberslacking. Organisational Development- concept, values, and intervention techniques; Appreciative Inquiry.

Individual and organisational stressors; consequences of stress on individual and organisation; management of stress.

Note: Some cases of real business world to supplement learning from the course.

Suggested Readings:

1. Robbins, Stephen P. and Timothy A. Judge, *Organizational Behaviour*, Prentice -Hall, New Delhi.
2. Robins S.P., and Mathew, M.,*Organisational Theory: Structure, Design and Application*, Prentice Hall of India Pvt. Ltd.
3. Luthans, Fred, *Organizational Behaviour*, McGraw-Hill, New York.
4. Sekaran, Uma, *Organisational Behaviour*: *Text and Cases*, Tata McGraw-Hill Publishing Co. Ltd.
5. Aswathappa, K., *Organisation Behaviour*, Himalaya Publishing House, New Delhi.
6. Singh, K., *Organizational Behaviour: Text and Cases*, Pearson.
7. Pareek, U. and Khanna, S., *Understanding Organizational Behaviour,* Oxford University Press.
8. Newstorm, John W., Organizational *Behaviour: Human Behaviour at work*, Tata McGraw- Hill Pub. Co. Ltd. New Delhi.
9. Hersey, Paul, Dewey E. Johnson, and Kenneth H. Blanchard, *Management of Organisational Behaviour*, Prentice-Hall of India, New Delhi.
10. Terrance R. Motchell, *People in Organization An Introduction to Organisational Behaviour*, McGraw-Hill, New York .

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester II

Course 4201: QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of this paper is to acquaint the students with quantitative techniques that play an important role in managerial decision-making.

Contents:
Unit I – Fundamental of decision making: Types of decisions; Steps in decision making; Quantitative analysis and decision making; Different types of models and their uses; Model building steps.

Unit II - Linear Programming: Basic concepts; mathematical formulation and applications; Solution of LP problem using graphic and simplex method; Use of artificial variables; Sensitivity analysis and interpretation of solution; Duality in linear programming – formulation and solution; Integer linear programming – solution.

Unit III – Transportation, Assignment and Trans-shipment: Formulation; Solving transportation and assignment problems; Dealing with exceptional cases of transportation and assignment problems.

Unit IV - Inventory and Queuing Management: Concepts of inventory management; Inventory models – classical EOQ, EOQ with price breaks, EOQ model for production runs, planned shortage model- deciding optimum safety stock and reorder level, probabilistic model; Techniques of selective control.

Queuing models: Elements of a queuing system; Models with Poisson arrival and Exponential services rates- single server and infinite and finite population; Cost behavior analysis.

Simulation: Monte Carlo Simulation, Application of simulation in inventory management and queuing situation.

Unit V – Project Scheduling: Concepts of PERT & CPM techniques and their applications; Network analysis- scheduling activities, determining critical path, calculation of floats; Time-cost trade-off; Resource allocation and resource levelling.

Unit VI- Markov Chains and Theory of Games: Markov Chains- decision processes; Market share analysis; Account receivable analysis.

Game Theory- Pure strategy games; Mixed strategy games; Value of the game; Rules of Dominance.

Suggested Readings:

1. Levin, R.I., D.S. Rubin and J.P. Stingson, *Quantitative Approaches to Management*, McGraw - Hill.

2. Vohra N.D*., Quantitative Techniques in Management*, The McGraw Hill companies

3. Bierman H. Jr, C.P. Bonini and W.H. Hausman, *Quantitative Analysis for Business Decisions*, Homewood, Ill., Irwin.

4. Anderson, *Quantitative Methods for Business*, CENGAGE.

5. Gupta and Khanna, *Quantitative Techniques for Decision Making,* Prentice Hall of India.
6. Kapoor V.K., *Operations Research: Concepts, Problems and Solutions,* Sultan Chand & Sons.

7. Swarup Kanti, P K Gupta, Manmohan, *Operations Research,* Sultan Chand & Sons.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester II

Course 4202: FINANCIAL MANAGEMENT AND POLICY

Marks: 100 (Theory = 70, Internal Assessment = 30)

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Objective: *To make students understand various issues involved in financial management of a firm and equip them with advanced analytical tools and techniques that are used for making sound financial decisions and policies.*

Contents:
Unit I- Introduction: Nature, scope and objectives of financial management. Financial decision making and types of financial decisions. Finance as a strategic function. Role of finance manager. Agency problem. Stock price maximization and agency costs. Alternatives to stock price maximization. Stakeholders' wealth maximization. Risk-return framework for financial decision making.

Unit II- Capital Budgeting: Nature, significance and kinds of capital budgeting decisions. Cash flow estimation. Capital budgeting techniques- ARR, Payback period, Discounted payback period, NPV, Equivalent annual NPV, IRR, Incremental IRR and Modified IRR. Capital budgeting decisions under constraints and with multiple objectives using mathematical programming models (Linear programming and Integer Programming). Capital rationing. Capital budgeting decision under inflation. Capital budgeting decision under uncertainty. Techniques for incorporating risk and uncertainty in capital budgeting decisions- RADR, Certainty equivalent method, DCF Break even analysis, Simulation method, Probability distribution method, Decision tree analysis, Sensitivity analysis and Scenario analysis. Real options.

Unit III- Capital Structure: An overview of cost of capital- Specific and WACC. Financial leverage and evaluation of financial plans (EBIT-EPS analysis). Theories of capital structure- NI, NOI, MM Hypothesis without and with corporate taxes, Merton Miller argument with corporate and personal taxes, Trade off theory, Pecking order theory, Signaling theory and effect of information asymmetry on capital structure. Optimal capital structure. Determinants of Capital structure in practice.

Unit IV- Dividend Policy: Forms of dividends. Theories of relevance and irrelevance of dividend in firm valuation (Walter's model, Gordon's Model, MM Hypothesis, Bird-in-hand theory and Dividend signaling theory).Relevance of dividend policy under market imperfections. Traditional and Radical position on dividend. Issues in dividend policy. Types of dividend polices in practice (constant rupee dividend policy, constant dividend payout policy, smooth stream dividend policy etc.) Determinants of dividend policy. Lintner's Model on corporate dividend behavior.

Unit V- Working Capital Planning and Management: Concept and types of working capital. Operating and cash cycle. Estimation of working capital requirement. Working capital financing. Determinants of working capital. Components of working capital management. Cash management- Baumol's Model and

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Miller-Orr Model of managing cash. Receivables management- dimensions of credit policy of a firm and evaluation of credit policies; credit analysis. Inventory management.

Unit VI- Corporate Restructuring and Contemporary Issues in Financial Management: Corporate restructuring. Mergers and Acquisitions- types, sources of takeover gains, valuation and financing of M&As. Leveraged buyouts; Spin offs; demerger. Contemporary issues in financial management.

Note: Use relevant case studies to supplement class discussions.

Suggested Readings:

1. Van Horne, James C., *Financial Management and Policy*, Prentice Hall of India.
2. Pandey, I. M., *Financial Management,* Vikas Publishing.
3. Ross S.A., R.W. Westerfield and J. Jaffe, *Corporate Finance*, McGraw Hill.
4. Brealey R.A. and S.C. Myers, *Principles of Corporate Finance*, McGraw Hill.
5. Damodaran, A.,*Corporate Finance: Theory and Practice,* John Wiley & Sons.
6. Chandra, P. *Financial Management*, Tata McGraw Hill.
7. Khan, M.Y & Jain, P.K *Financial Management: Text, Problems and Cases*, Tata McGraw Hill.
8. Ehrhardt, M. C. & Brigham E. F, *Corporate Finance*, Indian Edition, Cengage Learning
9. Srivastava, Rajiv and Misra. Anil, *Financial Management,* Oxford University Press.
10. Arthur J. Kewon, John H. Martin, J. William Petty &David F. Scott, *Financial Management: Principles & Application,* Pearson.
11. Meyer. et.al, *Contemporary Financial Management*, Cengage Learning.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester II

Course 4203: MARKETING MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: *To familiarize the students with the basic concepts and principles of marketing and to develop their conceptual and analytical skills to be able to manage marketing operations of a business firm.*

Contents:
Unit I-Introduction: Nature and Scope of Marketing; Core Marketing Concepts; Evolution of modern marketing concept; Modern marketing concepts; Marketing Mix; Marketing management process-a strategic perspective; Customer quality, value and satisfaction; Planning and control.
Marketing Environment: Significance of scanning marketing environment; Analyzing macro environment of marketing-economic, demographic, socio-cultural, technological, political and legal segments; Impact of micro and macro environment on marketing decisions.
Buyer behaviour: Need for studying buyer behaviour; Consumer vs. business buying behaviour; Consumer buying decision process and influences; Industrial buying process.
Market Segmentation, Targeting and Positioning: Bases for segmenting a consumer market; Levels of market segmentation; Factors influencing selection of market segments; Criteria for effective market segmentation; Target market selection and strategies; Positioning – concept, bases and process.

Unit II-Product and Pricing Decisions: Product - concept and classification; Major product decisions; New product development; Packaging and labelling; Product support services; Branding decisions; Product life cycle – concept and appropriate strategies adopted at different stages.
Pricing- Objectives, Factors affecting price of a product, Pricing policies and strategies. Ethical issues in product and pricing decisions.

Unit III-Distribution Decisions: Channels of distribution – concept and importance; Different types of distribution middlemen and their functions; Channel management, selection, motivation and performance appraisal of distribution middlemen; Distribution logistics – concept, importance and major logistics decisions; Channel integration and systems. Ethical issues in distribution decisions.
Retailing and Wholesaling: Types of retail formats; Retail theories; Retailing strategies; Non-Store retailing; Wholesaling-nature and importance, types of wholesalers; Developments in retailing and wholesaling in Indian perspective.

Unit IV-Promotion Decisions: Role of promotion in marketing; Promotion methods; Integrated Marketing Communication – Concept; Communication process and promotion; Determining promotion mix; Factors influencing promotion mix; Developing advertising campaigns. Ethical issues in promotion decisions.

Unit V- Marketing Planning, Organising and Control: Marketing planning process; Different ways of organising marketing department; Sales, cost and profit analysis.

Unit VI-Trends in Marketing: Service Marketing, Social Media Marketing, Green Marketing, Customer Relationship Management, Rural marketing, other emerging trends.

Note: Class discussions to be supported by relevant case studies.

Suggested Readings:

1. Kotler, Philip; Keller, Kevin Lane; Koshy, Abraham, and Mithileshwar Jha, *Marketing Management: A South Asian Perspective*, Pearson.
2. Lamb, Charles W.; Hair, Joseph F., and Carl McDaniel, *Mktg*, Cengage Learning.
3. Etzel, Michael J., Walker, Bruce J., Staton, William J., and Ajay Pandit, *Marketing Concepts and Cases*, Tata McGraw Hill (Special Indian Edition).
4. Czinkota, Miachel, *Marketing Management*, Cengage Learning.
5. Kazmi, SHH, *Marketing Management Text and Cases*, Excel Books.
6. Kumar, Arun and N. Meenakshi, *Marketing Management*, Vikas Publishing House.
7. Zikmund, William G. and Michael D'Amico, *Marketing: Creating and Keeping Customers in an E-Commerce World*, South-Western College Pub.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester II

Course 4204: LEGAL ASPECTS OF BUSINESS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: *The course aims to acquaint the students with knowledge and understanding of major business laws.*

Contents:
Unit I-Law relating to Transfer of Property: Important definitions; types of properties; movable and immovable property; properties which cannot be transferred; rule against perpetuities; lis pendens; provisions relating to sale; mortgage, charge, lease, gift and actionable claim.

Unit II-Law relating to Societies and Trusts: General concept relating to registration of societies; property of societies; suits by and against societies; enforcement of judgment against societies; dissolution of societies; general concept relating to trusts; creation of a trust; duties and liabilities of trustees; rights and powers of trustees, disabilities of trustees; rights and liabilities of the beneficiary.

Unit III-Law relating to Intellectual Property: Concept and development of intellectual property law in India; law and procedure relating to patents, trademarks and copyrights; geographical indications; design act; overview of laws relating to other intellectual property rights; intellectual property appellate board.

Unit IV-Law relating to Competition and Consumer Protection: Concept of competition; Competition Act, 2002 - anti competitive agreements, abuse of dominant position, combination, regulation of combinations, competition commission of India; compliance of competition law; Consumer protection in India- Consumer Protection Act, 1986; rights of consumers; consumer disputes redressal agencies.

Unit V-Law Relating to Information: Right to Information Act, 2005- Definitions, right to information, obligations of public authorities, request for obtaining information, disposal of request, exemption from disclosure of information, grounds for rejection to access in certain cases, severability; central information commission- its constitution, term of office, conditions of service and removal; powers and functions of Central Information Commissions, appeals and penalties.

Unit VI-Law relating to Pollution Control and Environmental Protection: Concept of sustainable development, biodiversity and carbon credit; government policy regarding environment; law relating to prevention and control of air pollution and water pollution; Environment (Protection) Act, 1986; national green tribunal.

Suggested Readings:

1. Singh, Avtar, *The Principles of Mercantile Law*, Eastern Book Company, Lucknow.
2. Sharma J. P., and SunainaKanojia, *Business Laws,* Ane Books Pvt. Ltd, New Delhi.

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3. Bhandari, Munish, *Professional Approach to Corporate Laws and Practice*, Bharat Law House, New Delhi.
4. *Handbook of Corporate Laws*, Bharat Law House, New Delhi
5. Sir Dinshaw Fardunji Mulla, revised by Dr. Poonam Pradhan Saxena, *Mulla's The Transfer of Property Act*
6. Sanjiva Row, revised by Justice K. Shanmukham & Shrinivas Gupta, *Transfer of Property Act (with Model Forms of Sale Deed, Agreement to Sell, Mortgage, Lease Deed, Gift Deed, Partition Deed, Assignment of Actionable Claim etc.) (in 2 Vols)*
7. *Bare Acts on* Societies and Trusts
8. *Bare Act on* Competition Law
9. *Bare Act on* Consumer Protection Law
10. *Bare Act on* Pollution Control and Environmental Protection
11. *Bare Act on* Right to Information Act Law

Note: Latest edition of the readings may be used.

Master of Commerce
Semester II

Course 4205: INTERNATIONAL BUSINESS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The purpose of this course is to acquaint the students with nature, scope, structure and operations of international business and familiarize them with trends and developments in International Business Environment and policy framework.

Contents:
Unit I – Introduction: International Business **-** Importance, nature and scope; Globalization; Drivers of Globalization. Basic Entry Decisions; Modes of entry into international business, selecting an Entry Strategy; IT and international business, India's involvement in International Business

Unit III - International Business Environment: Political, Legal, Economic, and Cultural environment and associated risks; Framework for analyzing international business environment.

Unit II - International Trade: Reasons for international trade; Theories of international trade; Foreign trade multiplier; World trading environment – Pattern and structure of world trade in goods and services; Government intervention in International Trade: Arguments for Government intervention; Instruments of Commercial Policy: Tariffs, quotas and other measures and their effects.
World Trade and Protectionism**:** GATT, The Uruguay Round, WTO, Evaluation of WTO, Important Agreements of WTO – Agriculture Agreements; SPS, TBT, GATS, TRIPS; WTO and Developing Countries, WTO and India.

Unit IV - Balance of Payment Account: Components of BOP: Current Account, Capital Account, Official Reserve Account; Disequilibrium in BOP; Correction of Disequilibrium.

Unit V - International Economic Institutions and Financial Environment: IMF, World Bank, UNCTAD, International commodity trading and agreements - India's involvement and consequences; International Financial Environment: International Monetary System; Exchange rate mechanism and arrangement; Types of Exchange rate systems in the world; International money and capital markets; Movements in foreign exchange and interest rates.
Foreign Direct Investment: Types of FDI; Theories of FDI, Cost and Benefit of FDI to Host and Home Countries, Government Policy Instruments and FDI, Trends in FDI.

Unit VI - Regional Economic Integration: Levels of Regional Economic Integration: Free trade area, customs union, economic union, common market, political union; Trade creation and diversion effects; Regionalism vs. Multilateralism; Structure and functioning of EU and NAFTA, SAARC.

Unit VII - Contemporary Issues in International Business: Environmental and Labour issues in International Business.

Suggested Readings:

1.Daniels, John D., Radebaugh, Lee H*., Sullivan, Daniel P. and Salwan, P., International Business: Environment and Operations*.
2.Griffin, Ricky W. and Pustay, Michael W, *International Business: A Managerial Perspective* , Prentice Hall.
3.Hill, Charles, W.L., *International Business*, McGraw Hill Company, New York.
4.Cherunilam, F., *International Business Text and Cases*, PHI.
5.Bhasin, N., *Foreign Direct Investment in India: Policies, Conditions and Procedures*, New Century Publications.
6.Ball, Donald, Wendall H. McCulloch, Miachel Geringer, Michael S. Minor and Jeanne M. McNett, *International Business: The Challenge of Global Competition*, McGraw Hill Co.

Note: Latest edition of the readings may be used.

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**Master of Commerce
Semester III**

Course 4301: GLOBAL STRATEGIC MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To help students understand strategy making process that is informed integrative and responsive to rapid changes in an organization's globally oriented environment and also to help them understand tasks of implementing strategy in a global market.

Contents:
Unit I-Introduction: Concept and Role of Strategy; The Strategic Management Process; Approaches to Strategic Decision Making; Strategic Role of Board of Directors & Top Management.
Strategic Intent; Concept of Strategic Fit, Leverage and Stretch; Global Strategy and Global Strategic Management; Strategic flexibility and learning organization.

Unit II-Environmental Analysis: Analysis of Global Environment- Environmental Profile; Constructing Scenarios; Environmental scanning techniques- ETOP, PEST and SWOT (TOWS) Matrix; Michael Porter's Diamond Framework; Analysis of Operating Environment - Michael Porters Model of Industry Analysis; Strategic Group Analysis; The International Product Life Cycle (IPLC)
Analysis of Internal Environment– Resource Audit; Resource Based View (RBV), Global Value Chains Systems; Core and Distinctive Competencies; From Sustainable Competitive Advantage to Transient Competitive Advantage.

Unit III-Strategic Choice: Strategic options at Corporate Level – Growth, Stability and Retrenchment Strategies; Corporate Restructuring; Strategic options at Business Level- Michael Porters' Competitive Strategies and Cooperative Strategies.
Evaluation of Strategic Alternatives – Product Portfolio Models (BCG matrix, GE Matrix, etc.)

Unit IV-Situation Specific Strategies: Strategies for situation like competing in emerging industries, maturing and declining industries, fragmented industries, hyper –competitive industries and turbulent industries; Strategies for industry leaders, runner -up firms and weak businesses.

Unit V-Strategic Issues and Alternatives in Globally Competitive Markets: Why & how firms internationalize; International entry options; Joint Ventures, Foreign Technology Agreements, Mergers and Acquisitions; Multi-country and global strategies; Outsourcing strategies.

Unit VI-Strategy Implementation and Control: Interdependence of Formulation and Implementation of Strategy; Issues in global strategy implementation- Planning and allocating resources; Organisation Structure and Design; Budgets and support system commitment; culture and leadership. Strategy evaluation and control.

Unit VII-Ethical and Social considerations in Global Strategic Management: The Global Context of Corporate Governance.

Note: Case studies and problems involving issues in global strategy are required to be discussed.

Suggested Readings

1. Hill, Charles W.L. and Gareth R. Jones, *Strategic Management: An Integrated Approach,* Cengage Learning, India.
2. Ungson, G.R. and Yim-Yu-Wong, *Global Strategic Management*, M.E. Sharpe.
3. Davidson, W.H., *Global Strategic Management,* John Wiley, New York.
4. Thompson, Arthur A. and A. J. Strickland*, Strategic Management*, McGraw Hill, New York.
5. Hitt, Michael A., Ireland, R. D., Hokisson, Robert E. and S. Manikutty, *Strategic Management: A South- Asian Perspective*, Cengage Learning, India
6. Bartlett, C.A., Ghoshal, S. and P. Beamish, *Transnational Management: Text, Cases, and Readings in Cross-Border Management*, McGraw Hill.
7. Porter, Michael E., *Competition in Global industries*, Harvard University Press, New York, 1986.
8. Porter, Michael E., *The Competitive Advantage of Nations*, Macmillan, London, 1990.
9. Frynas, J.G. and K. Mellahi, *Global Strategic Management*, Oxford University Press.
10. Henry, Anthony E., *Understanding Strategic Management*, Oxford University Press, New York.
11. Wheelen, Thomas L., Hunger, J. David, Hoffman, Alan N. and Charles E. Bamford, *Strategic Management and Business Policy: Globalization, Innovation and Sustainability,* Prentice Hall, New Jersey.
12. Sengupta, N. and J.S. Chandan, *Strategic Management: Contemporary concepts and Cases*, Vikas Publishing.
13. Ghosh, P.K., *Strategic Management- Text & Cases*, Sultan Chand & Sons.
14. Nag, A., *Strategic Management- Analysis, Implementation, Control*, Vikas Publishing.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester II

Course 4302: ENTREPRENEURSHIP

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: This Course Aims at Instituting Entrepreneurial skills in the students by giving an overview of who the entrepreneurs are and what competences are needed to become an entrepreneur.

Contents:
Unit I-Introduction: Concept and Definitions, Entrepreneur **v/s** Intrapreneur; Role of entrepreneurship in economic development; Entrepreneurship process; Factors impacting emergence of entrepreneurship; Managerial versus entrepreneurial Decision Making; Entrepreneur **v/s** Investors; Entrepreneurial attributes and characteristics; Entrepreneurs versus inventors; Entrepreneurial Culture; Women Entrepreneurs; Social Entrepreneurship; Classification and Types of Entrepreneurs; EDP Programmes; Entrepreneurial Training; Traits/Qualities of an Entrepreneurs.

Unit II- Creating Entrepreneurial Venture: Generating Business idea- Sources of Innovation, methods of generating ideas, Creativity and Entrepreneurship; Challenges in managing innovation; Business planning process; Drawing business plan; Business plan failures; Entrepreneurial leadership- components of entrepreneurial leadership; Entrepreneurial Challenges; Legal issues – forming business entity, considerations and Criteria, requirements for formation of a Private/Public Limited Company, Intellectual Property Protection- Patents Trademarks and Copyrights – importance for startups, Legal Acts Governing Business in India.

Unit III-Functional plans: Marketing plan– for the new venture, environmental analysis, steps in preparing marketing plan, marketing mix, contingency planning; Organizational plan – designing organization structure and Systems; Financial plan – pro forma income statements, pro forma cash budget, funds Flow and Cash flow statements; Pro forma balance sheet; Break Even Analysis; Ratio Analysis.

Unit IV- Entrepreneurial Finance: Debt or equity financing, Sources of Finance- Commercial banks, private placements, venture capital, financial institutions supporting entrepreneurs; Lease Financing; Funding opportunities for Startups in India.

Unit V- Enterprise Management: Managing growth and sustenance- growth norms; Factors for growth; Time management, Negotiations, Joint ventures, Mergers & acquisitions.

Suggested Readings:

1. Kumar, Arya, Entrepreneurship: Creating and Leading an Entrepreneurial Organization, Pearson, India.
2. Hishrich., Peters, Entrepreneurship: Starting, Developing and Managing a New Enterprise, Irwin
3. Taneja, Entrepreneurship, Galgotia Publishers.
4. Barringer, Brace R., and R. Duane Ireland, Entrepreneurship, Pearson Prentice Hall, New Jersy (USA)
5. Hisrich, Robert D., Michael Peters and Dean Shephered, Entrepreneurship, Tata McGraw Hill, New Delhi
6. Lall, Madhurima, and Shikha Sahai, Entrepreneurship, Excel Books, New Delhi
7. Charantimath, Poornima, Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi
8. Natarajan., K and E. Gordon, Entrepreneurship Development, Himalya Publication, India.
9. Vasant, Desai., Small- Scale Industries and Entrepreneurship, Himalya Publication, India.
10. Kuratko, D.F., and T. V. Rao, Entrepreneurship: A South-Asian Perspective, Cengage Learning

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV

Course 4401: CORPORATE GOVERNANCE, ETHICS AND SOCIAL RESPONSIBILITY OF BUSINESS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To familiarize the students with the knowledge of ethics, emerging trends in good governance practices and corporate social responsibility in the global and Indian context.

Contents:
Unit I-Business Ethics: The concept of ethics; 'ethics' and related connotations; business values and ethics; concept of business ethics; various approaches to business ethics; ethical theories; ethical governance; social responsibility–an extension of business ethics; the concept of corporate ethics; benefits of adopting ethics in business; ethics programme; code of ethics; ethics committee.

Unit II-Conceptual Framework Of Corporate Governance: Evolution of corporate governance; developments inIndia; regulatory framework of corporate governance in India; SEBI guidelinesand clause 49; reforms in the Companies Act; secretarial audit; class action; NCLT; insider trading; rating agencies; green governance/e-governance;shareholders' activism; corporate governance in PSUs and banks;legislative framework of corporate governance –an international perspective (United Kingdom, USA, Australia, China, Russia, South Africa).

Unit III-Corporate Management: Management vs. Governance; internal constituents of the corporate governance; key managerial personnel (KMP); chairman- qualities of a chairman, powers, responsibilities and duties of a chairman; chief executive officer (CEO), role and responsibilities of the CEO; separation of roles of chairman and CEO; CFO; manager; company secretary; auditor.

Unit IV-Role and Functions of Board Committees: Standing committees, ad-hoc committees, task force committees, advisory committees; powers, functions and duties of board committees; enhanced performance of board committees; limitations of board committees; statutory committees of board- audit committee, remuneration committee, nomination committee, compliance committee, shareholders grievance committee, investors relation committee, investment committee, risk management committee, other committees.

Unit V-Major Corporate Failures –Bank of credit and commerce international (UK), Maxwell communication corporation and Mirror group newspapers (UK), Enron (USA), World.com (USA), Andersen worldwide (USA), Vivendi (France), News of the world (UK); Satyam computer services ltd (India); Sahara (India); Kingfisher ltd (India); common governance problems noticed in various corporate failures; policy actions including major codes and standards.

Unit VI-Whistleblowing and Corporate Governance – The Concept of Whistle-Blowing; Types ofWhistle-blowers; Whistle-blower Policy; the Whistle-Blower Legislation across Countries; developments in India.

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Unit VII-Corporate Social Responsibility (CSR) –Meaning; corporate philanthropy; CSR-an overlapping concept; corporate sustainability reporting;CSR through triple bottom line;CSR and business ethics; CSR and corporate governance; environmental aspect of CSR; CSR models; drivers of CSR; global reporting initiatives;major codes on CSR; initiatives in India.

Suggested Readings:

1. Mallin, Christine A., *Corporate Governance (Indian Edition)*, Oxford University Press,New Delhi.
2. Blowfield, Michael, and Alan Murray, *Corporate Responsibility*, Oxford UniversityPress.
3. Francesco Perrini, Stefano, and Antonio Tencati, *Developing Corporate Social Responsibility-A European Perspective*, Edward Elgar.
4. Sharma, J.P., *Corporate Governance, Business Ethics & CSR*, Ane Books Pvt Ltd, New Delhi.
5. Sharma, J.P., *Corporate Governance and Social Responsibility of Business*, Ane Books Pvt. Ltd, New Delhi.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV

Course 4402: BUSINESS RESEARCH

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: *The objective of the course is to acquaint the students with the process and techniques of conducting research. The course is expected to train the students to plan and execute the research studies in business.*

Contents:
Unit I: Introduction to Business Research: Meaning and role of business research; Business research and scientific method; Scope of business research; Organisation of business research: Outsourcing and in-house research; Business research process: An overview; Ethics in business research.

Unit II: Problem Specification: Management problem specification, Formulating research problem, Developing research proposal – research objectives, research hypotheses, information needs; Determining research design: Explorative research – major techniques and their evaluation; Descriptive researches – case study, survey method and observation method; Causal research – major experimental designs and their evaluation; Reliability validity in experimentation; Quantitative vs qualitative research.

Unit III: Determining Data Sources: Secondary data sources and their usefulness; Primary data collection – Observation and questioning methods; Questionnaire preparation; Scaling techniques and attitude measurement; Reliability and validity assessment.

Unit IV: Survey Design: Census and survey methods; Designing sample survey – Defining universe, Determining sampling frame, sampling unit, sampling method and sample size.

Unit V: Data Collection: Organising fieldwork – selection, training, supervision and evaluation of fieldworkers, Survey errors – sampling vs. non-sampling errors; Types of non-sampling errors and ways to deal with them; Data analysis and interpretation: Data editing and coding, Univariate analysis; Bivariate analysis; Multivariate data analysis – Interdependence and dependence analyses and their basic assumptions; Time series analysis.

Unit VI: Major Multivariate Data Analysis Techniques: Basic concepts and applications of multivariate analysis of variance, multiple regression, factor analysis, cluster analysis, discriminant analysis and conjoint analysis.

Unit VII: Communicating Research Results: Research report preparation, presentation and follow-up.

Suggested Readings:

1.   Cooper, Donald R., and Schindler, Pamela S. *Business Research Methods*: Tata McGraw Hill
2.   Emory, C. William, *Business Research Methods*, Richard D. Irwin .Inc. Homewood, Illinois.
3.   Kerlinger Fred N, *Foundations of Behavioral Research*, Surjeet Publications, Delhi.
4.   Sekaran Uma, and Bougie Roger, *Research Methods for Business*, A Skill Building Approach, Wiley India.
5.   Srivastava, T. N. and Rego, Shailja, *Business Research Methodology,* Tata McGraw Hill.
6.   William G. Zikmund, *Business Research Methods* ,Thomson.
7.   Damodar Gujarati, Dawn, C. Porter and Sangeetha Gunasekar, *Basic Econometrics*,   Publisher Tata McGraw Hill.
8.   Harper W. Boyd, Ralph Westfall and Stanley F. Stasch, *Marketing research, Text and Cases*, Homewood, I11: Irwin.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Major Group- Finance)

Course MJ 301: FINANCIAL INSTITUTIONS & MARKETS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objectives: The purpose of this course is to equip the students with an understanding of the financial system, its constituents, the principles on which it operates, inter linkages and regulatory concerns.

Contents:
Unit I - Introduction: Overview of financial markets& securities, Role of financial institutions, depository and non-depository institutions, consolidation & competition among financial institutions, financial conglomerates.
Overview of the Indian financial system including financial sector reforms. Other contemporary issues in finance.

Unit II- Interest Rate: Loanable Funds Theory, economic forces affecting interest rates, factors affecting yield differentials of debt instruments. Term structure of interest rates: Pure Expectations Theory, Liquidity Premium Theory, Segmented Markets Theory & Preferred Habitat Theory, Yield Curve.

Unit III- Financial Markets: Money markets-organization, economic role, instruments & regulation.
Capital Markets- Primary & Secondary markets and their organization. Security market regulation and stability.
Role of SEBI.

Unit IV- Banking: An overview of the banking industry, balance sheet of a bank, sources & uses of funds of banks, fee based & off balance sheet activities. Securitization. Bank earnings & bank performance, investment banking.
Bank failure & regulation; Reasons for banks being heavily regulated, bank run, deposit insurance, capital adequacy regulation, bank examination etc. The problem of moral hazard & too big to fail institutions.
RBI and its policy evolution.

Unit V- Financial Services and Non Depository Institutions: Various fund based and fee based financial services- Leasing, Factoring, Forfaiting, Merchant Banking, Credit rating, Custodial services etc. Mutual Funds: Types of mutual funds schemes, ETFs, hedge funds, venture capital funds, private equity funds and regulation.
An overview of Indian Mutual Funds Industry.
Pension Funds: Issues in saving for retirement & role of the financial system; Defined benefit & defined contribution pension plans, Pension funds as financial intermediaries and their regulation.
An overview of Indian pension fund industry including NPS.
Insurance: Incentive problems in insurance-moral hazard & adverse selection, pure premium, premium smoothing etc. Reinsurance, catastrophe insurance. Regulation. An overview of the Indian insurance industry.
Role of SEBI.

Unit VI- Financial Inclusion: Extent of exclusion, financial inclusion initiatives including SHG-Bank linkage Model. Micro finance- emerging issues & regulation.

Suggested Readings:

1. Kohn Meir, *Financial Institutions and Markets*, Oxford University Press.
2. Madura Jeff, *Financial Markets and Institutions*, South Western Cengage Learning.
3. Mishkin, Fredrick S. and Stanley G. Eakins, *Financial Markets and Institutions*, Pearson Education India.
4. Kidwell, David S., Backwell, David W., Whidbee, David A. and Sias Richard W.,*'Financial Institutions, Markets and Money',* Wiley.
5. Reserve Bank of India – Various publications.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Major Group- Finance)

Course MJ 302: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: *To equip the students with advanced analytical tools, models and financial theory necessary for making sound investment decisions and optimum portfolio choice as well as understanding the paradigms by which financial securities are valued.*

Contents:

Unit I- Introduction: Investment environment, various asset classes and financial instruments. Investment process. Return-risk analysis and impact of taxes and inflation. Types and sources of risks. Risk Aversion. Diversification and Hedging. Contemporary issues in investment management- Socially responsible investing (SRI), Ethical investing etc.

Unit II- Analysis of Fixed Income Securities: Bond fundamentals; Types of bonds; valuation of bonds; bond yields; bond price- yield relationship; analysis of risks in bonds-duration and convexity. Bond portfolio management- passive bond management and active bond management including bond immunization strategies.

Unit III- Equity Analysis: Measurement of return and risk of equity shares. Approaches to equity analysis. Fundamental Analysis- Economy, Industry, Company Analysis; Equity Valuation Models (DDM, P/E Ratio model and Free Cash Flow Valuation approach).Forecasting P/E ratio. Technical Analysis – Market indicators and specific stock indicators including Bollinger bands. Efficient market hypothesis. Tests of market efficiency and empirical evidence. Assumption of Investor's rationality and its critique. Behavioural Finance- behavioural biases (Framing, Mental accounting, Regret avoidance and Prospect theory).

Unit IV- Portfolio Analysis, Selection and Management: Risk aversion and capital allocation to risky assets and risk free asset; Risk tolerance and asset allocation; Optimal risky portfolio- Markowitz portfolio selection model. Sharpe's single Index Model and optimal portfolio construction. Capital Asset Pricing Model (CAPM) and Market Anomalies (Size effect, Value effect, Seasonality effect, Overreaction effect etc) . Extensions of CAPM (Zero beta CAPM and Merton's Inter temporal CAPM).Arbitrage Pricing Theory and Multifactor Asset Pricing Models. Active and Passive portfolio management. Investment strategies- value investing, momentum and contrarian strategies etc. Portfolio performance evaluation (Sharpe index, Treynor Index, Jensen's alpha, Information ratio, Fama's decomposition measure).Portfolio revision.

Unit V- Financial Derivatives: Futures-types and payoffs. Pricing of financial futures and commodity futures (Cost of carry model). Options- types and valuation using Black and Scholes Model. Put call parity. Options trading strategies. Exotic options, Portfolios of futures and options synthetics. Financial engineering.

Note: Some case studies related to above topics are required to be discussed.

Suggested Readings:

1. Bodie, Zvi., Kane Alex and Alan J. Marcus, *Investments,* McGraw Hill.
2. Reilly, Frank K, and Brown, Keith C., *Investment Analysis and Portfolio Management*, Cengage Learning.
3. Chandra, P., *Security Analysis and Portfolio Management*, Tata McGraw Hill.
4. Vishwanath, R and Krishna Murthi C., *Investment Management,* Springer
5. Fischer, Donald E. and Ronald J. Jordan, *Security Analysis and Portfolio Management*, PHI Learning.
6. Elton, E. and Gruber, M, *Modern Portfolio Theory and Investment Analysis*, John Wiley and Sons.
7. Damodaran, A., *Investment Valuation,* John Wiley & Sons.
8. Sharpe William F, and Bailey Jeffery V, Alexander Gordon J, *Investments*, PHI Learning.
9. Hull, J.C., *Options*, *Futures and Other Derivatives*, Prentice Hall.
10. Bhalla, V. K., *Investment Management*, S. Chand & Company Ltd.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Major Group- Finance)

Course MJ 403: INTERNATIONAL FINANCIAL SYSTEM

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of this paper is to equip the students with an understanding of the international financial system, its evolution and growing importance as well as challenges thrown up by increasing globalization of finance.

Contents:
Unit I - Introduction: Growing importance of international finance, costs of international investment-crisis & contagion. Balance of Payments-current account, capital account, official reserve account, the J curve, forex reserves-costs and benefits. BOP trends in major countries, persistent current account deficits & surpluses among nations (Global Imbalances) & their repercussions. Shifting global dominance of the U.S.A., growing importance of a unified Europe and emerging Asia.

Unit II- International Monetary System: Evolution of the international monetary system, bimetallism, Gresham's Law, classical gold standard, its strengths and weaknesses, inter war period, Bretton woods system, Triffin's Paradox, special drawing rights, flexible exchange rate regime, present arrangements including dollarization.
The European Monetary Union & its costs & benefits.
Fixed versus floating exchange rate systems.

Unit III- Exchange Rate Determination & Forecasting: Measuring exchange rate movements & volatility, factors influencing exchange rates, Government intervention-direct & indirect intervention and sterilized & non-sterilized intervention.
Interest Rate Parity, covered and uncovered interest arbitrage, Purchasing Power Parity-absolute & relative, Fisher Effect & International Fisher Effect.
Forecasting Exchange Rates- Technical Approach, Fundamental Approach & Efficient Market Approach.

Unit IV- International Financial Markets: Forex Markets; spot market, direct & indirect exchange quotations, bid ask spread, cross exchange rates, forwards, futures & options market.
International money markets, international credit markets, international bond markets & international stock markets. Regulatory asymmetry & its implications.

Unit V- International Banking: Offshore banking & offshore currency trading, factors contributing to the growth of international banking & Eurocurrency trading, regulatory asymmetry, shadow banks. Bank failure & safety nets, the problem of moral hazard & systematically important financial institutions. Problems in regulating international banking, regulatory arbitrage. BIS & Basel Committee-issues & challenges.

Unit VI- Financial Crisis: Financial flows to developing countries, the problem of original sin, crisis in the Latin American countries, growth & crisis in Asia, contagion. Capital mobility-the trilemma of the

exchange rate regime. Lessons from the crisis. Role of International financial institutions like IMF & World Bank. Securitization and the financial crisis of U.S.A. (2008-09), role of credit rating agencies. Euro zone crisis and other contemporary issues.

Suggested Readings:

1. Levi D, Maurice, *International Finance*, Routledge.
2. Krugman, Paul R., Obstfeld, Maurice and Melitz, Marc, *International Economics*, Pearson Education.
3. Madura, Jeff, *International Corporate Finance*, South-Western/Cengage learning.
4. Eun, Cheol S. and Resnick, Bruce G*., International Financial Management*, Tata McGraw- Hill.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Major Group- Finance)

Course MJ 404: INTERNATIONAL FINANCIAL MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: *The objective of this course is to provide the students with a deep understanding of financial management issues in a multinational enterprise (MNE). It equips the students with analytical tools and techniques for sound financial decision making in a global setting.*

Contents:
Unit -I: Introduction: Globalisation and the multinational enterprise (MNE).Complexities and issues in financial decision making of MNEs. Decisions in a global setting. Foreign Exchange Market- Spot and Forward market. Participants in foreign exchange market. Arbitrage, hedging and speculation. Covered interest rate arbitrage. Contemporary issues in international financial management.

Unit -II: Cross- Border Investment Decision: Types of and issues in cross border investment decision. Green field investment Vs. Cross border M&As. Estimation of cash flows from cross border investment projects. Valuation techniques including Adjusted Present Value method. Risks in cross border investment decision- currency risk, political risk, country risk, inflation risk etc. Techniques for incorporating risks in cross border investment decision. Assessment and management of political risk. Country risk analysis.

Unit-III: Financing Decision, Dividend decision and Working Capital Management in MNEs: International capital structure and cost of capital. Determinants of capital structure of MNEs. Financing of foreign subsidiaries or projects- Internal and External sources, Parent Debt and Parent Equity, Bank Guarantees, Parallel loans, credit swaps etc. New instruments of raising finance by MNEs- Eurobonds, Euro notes, Euro-commercial papers, fixed and floating rate notes, euro syndicated credits etc. Dividend policies of MNEs. Working capital management in an MNE- International Cash management, International Inventory management and International receivables management. Financing of foreign trade.

Unit-IV: Managing currency Risk and Interest rate Risk: Types of risk exposure- Transaction exposure, Economic exposure and Translation exposure. Measurement of risk exposure. Management of currency risk using currency forwards and futures, currency options and currency swaps. Assessment of interest rate risk. Management of interest rate risk using Interest rate futures, interest rate swaps and other financial swaps.

Unit- V: International Diversification and Portfolio Investment: Global markets for equities. Risk factors in international investing. International diversification- risk and return aspects. International CAPM assuming no differences in consumption and no barriers to investment as well as assuming such differences. Identification of optimum portfolio.

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Unit-VI: International Tax environment and International Accounting: International accounting and tax considerations in financial decision making of MNEs. International tax environment; bilateral tax treaties and tax heavens. Impact of international taxation on cross border investment decision. Transfer pricing and consolidated financial statements. Relevant Indian and International accounting standards.

Note: Some case studies related to above topics are required to be discussed.

Suggested readings:

1.Eun, Cheol S. and Resnick, Bruce G., *'International Financial Management'*, Tata McGraw-   Hill.
2. Apte P.G., *'Multinational Financial Management'*, Tata -McGraw Hill, New Delhi.
3. Bekaert, Greet and Hodrick, Robert J., *'International Financial Management',* Prentice Hall.
4. Madura, Jeff, *'International Financial Management'*, Cengage Learning.
5. Shapiro, Alan C., *'Multinational Financial Management'*, John Wiley.
6. Levi D, Maurice, *'International Finance'*, Routledge.
7. Sharan, V., *International Financial Management*, PHI Learning Pvt. Ltd.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Major group- Marketing)

Course MJ 311: INTERNATIONAL MARKETING

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To familiarize the students with the concept and issues of international marketing and enable them to be able to analyze the foreign market environment and develop international marketing strategies for a business firm.

Contents:
Unit I-Introduction: Nature, importance, and scope of international marketing; International market-orientation and involvement; International marketing management process- an overview, International marketing information system.
International Marketing Environment: Influence of physical, economic, socio - cultural, political and legal environments on international marketing decisions; Global trading environment and developments.
International Market Segmentation, Selection and Positioning; Screening and selection of markets; International market entry strategies –Exporting, licensing, contract manufacturing, joint venture, setting - up of wholly owned subsidiaries aboard.

Unit II-International Product Planning and Pricing decisions: Major Product decisions-product design, labeling, packaging, branding and product support services; Product standardization vs. adaptation; Managing product line; International trade product life cycle; New product development.
Pricing decisions for International Markets: Factors affecting international price determination; International pricing process and policies; Delivery terms and currency for export price quotations; Transfer pricing; Pricing in the context of counter trade.

Unit III-International Distribution Decisions: Distribution channel strategy- International distribution channels; their roles and functions; selection and management of overseas agents; International distribution logistics- inventory management, transportation, warehousing, and insurance.

Unit IV-International Promotion Strategies: Communications across countries-complexities and issues; Country-of-origin effect; International promotion tools and planning; Advertising, personal selling, publicity, and sales promotion; International public relations, Developing international promotion campaign; Standardization vs. adaptation issue; Planning for direct mail, sales literature, trade fairs, and exhibitions.

Unit V-Emerging trends in International Marketing: International Marketing through Internet; Ecological concerns and international marketing ethics.

NOTE: Class discussions to be supported by relevant case studies.

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Suggested Readings:

1. Keegan, Warran J. and Mark C. Green, *Global Marketing*, Pearson.
2. Cateora, Phillip R. ;Grahm, John L. and Prashant Salwan,*International Marketing*,Tata McGraw Hill.
3. Czinkota, Michael R. and Illka A. Ronkainon, *International Marketing*, Cengage Learning.
4. Terpstra, Vern; Foley, James and Ravi Sarathy, *International Marketing*, Naper Press.
5. Jain, Subash C., *International Marketing*, South-Western.
6. Kotabe, Masaaki and Kristiaan Helsen, *Global Marketing Management*, John Wiley & Sons.
7. Onkvist, Sak and John J.Shaw, *International Marketing; Analysis and Strategy*, Psychology Press.
8. Rajagopal, *International Marketing*, Vikas Publishing House.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester III
(Major group- Marketing)

Course MJ 312: ADVERTISING AND SALES MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To develop an in -depth understanding of the modern concepts and latest techniques of advertising and personal selling and sales force management which constitute a fast -growing area of marketing.

Contents:
<u>**Section A: Advertising**</u>

Unit I-Communication Basics: Communication and marketing; Communication process; Communication response hierarchy models; Cognitive processing of communication; EKB model; Marketing communication mix; Integrated marketing communication – an introduction; Advertising - Its importance and nature; Advertising and publicity; Advertising management process; Advertising objectives; DAGMAR Approach; Determination of Target Audience and positioning; Advertising budget – factors influencing budget decision and methods .

Unit II- Advertising Message and Media Decisions: Creativity and advertising; Creative process; Creative appeals and execution styles; Developing advertising copy for print ad - headline, body copy, logo, illustration and layout.
Media Decisions –Types of media, Advertising through Internet and interactive media; Developing media plan; media selection and scheduling.

Unit III-Organization and Evaluation of Advertising Efforts: Centralized and decentralized systems; In-house agency arrangements; Advertising agencies – selection, compensation and appraisal of advertising agency; managing advertising agency relations; IMC services; Reasons for evaluating Advertising Effectiveness; Advertising testing process - Before and after advertising tests and techniques.

Unit IV-Advertising in India: Social and regulatory aspects of advertising in India. Recent developments and issues in advertising.

<u>**Section B: Sales Management**</u>

Unit V-Fundamentals of Personal Selling: Nature and importance of selling; Types of selling; Personal selling, salesmanship and sales management; Process of effective selling; Sales management process; Environmental factors impacting selling; Managing ethics in selling environment; Role of personnel selling in customer relationship management

Unit VI-Sales Planning and Organization: Setting personal selling objective; Market analysis and sales forecasting; Sales budget; Sales territory; Sales quota; Role of IT in sales planning.

Sales Organization: Organization structure; Relationship of sales department with other departments; Distribution networks relationship.

Unit VII-Sales Force Management: Recruitment and selection; training and development- Objectives, techniques and Evaluation; Sales persons compensation and techniques – straight salary, straight commission, sales contests; rewards and expense accounts; motivating, and supervising sales personnel; Evaluation and Control of the sales effort – Evaluation of sales personnel performance, Sales and cost analysis.

Suggested Readings:

1. Aaker, David A., Rajeev Batra and John G. Mayers, *Advertising Management*, Prentice Hall of India.
2. Belch. George and Michael Belch, *Advertising and Promotion: An Integrated Marketing Communications Perspective*, McGraw Hill Education.
3. Still, Richard R., *Sales Management: Decisions, Strategies and Cases*, Pearson Education India
4. Anderson B. Robert, Professional Selling, Universe.
5. Johnston, Mark W. and Greg W. Marshall, *Sales Force Management: Leadership, Innovation, Technology*, Routledge.
6. Spiro, Rosann, William J. Stanton and Gregory A. Rich, *Management of a Sales Force*, McGraw Hill Education.
7. Hair, *Sales Management*, Cengage Learning.
8. Johnston, mark W. and Greg W. Marshall, *Contemporary Selling: Building Relationships and Creating Value*, Routledge.
9. Sharma, Kavita, *Advertising: Planning and Decision Making*, Taxmann.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester IV
(Major group- Marketing)

Course MJ 413: CONSUMER BEHAVIOUR

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To provide an in-depth understanding of the consumer and industrial buying processes and their determinants as relevant for marketing decision making.

Contents:
Unit I-Consumer Behaviour: Importance and nature of consumer behaviour; Types of consumers and their role; Consumer behaviour and marketing concept; Changing profile of Indian consumers and impact of technology. Conducting consumer research – overview of process, complexities and issues

Unit II-Consumer Decision Making Process: Buying Motives; Buying Roles; Consumer Buying Process; Levels of Consumer Decision Making.

Unit III-Individual differences in consumers: Needs and motivation; Perception; Attitude and attitude change; Learning and learning theories; Personality and life style analysis.

Unit IV-Socio-Cultural Determinants of consumer behaviour: Family and household influence on consumer buying behaviour; Group and their influences-WOM and opinion leaders, Social class; Culture and sub-culture. Cross-cultural dimensions of consumer behaviour

Unit V-Models of Consumer Behaviour and Business buying behaviour: An overview of contemporary models.

Note: Use relevant case studies to support learning in the class.

Suggested Readings:

1. Schiffman, L.G. and L.L.Kanuk, *Consumer Behaviour*, Prentice Hall.
2. Engel, J.F., Roser D. Blackwell and Paul W. Miniard, *Consumer Behaviour*, Cengage Learning.
3. Peter, J. Paul, and Jerry C. Olson, *Consumer Behaviour and Marketing Strategy*, McGraw Hill.
4. Assael, H., *Consumer Behaviour and Marketing Action*; Cengage Learning.
5. Hawkins, Dal I., Roger J. Best and Kenneth A. Coney, *Consumer Behaviour Implication for Marketing Strategy*, McGraw Hill.
6. Hawkins, Del I, Mothersbaugh, David L, Mookerjee A, Consumer Behaviour: Building Marketing Strategy, McGraw Hill, Indian Edition.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester IV
(Major group- Marketing)

Course MJ 414: SUPPLY CHAIN MANAGEMENT AND LOGISTICS

Marks: 100 (Theory = 70, Internal Assessment = 30)

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Objective: To acquaint the students with the concepts and tools of supply chain management and logistics as relevant for a business firm.

Contents:
Unit I-Introduction: Concept of supply chain management (SCM) and trade logistics; Scope of logistics; Logistic activities – an Overview; Contribution of logistics at macro and micro levels; SCM and trade logistics; Business view of SCM; Concept, span and process of integrated SCM; Demand management – methods of forecasting; Supply chain metrics (KPIs), performance measurement and continuous improvement; Product development Process and SCM; Strategic role of purchasing in the supply chain and total customer satisfaction; Types of purchases; Purchasing cycle.

Unit II-Managing Relationship: Role of Relationship marketing in SCM; Managing relationships with suppliers and customers; Captive buyers and suppliers; Strategic partnerships; Supplier-retailer collaboration and alliances.

Unit III- Focus Areas of Logistics and Supply Chain management: Transportation-Importance of effective transportation system; Service choices and their characteristics; inter-modal services; Transport cost characteristics and rate fixation; In-company management vs. out-sourcing; World sea borne trade; International shipping- characteristics and structure; Liner and tramp operations; Liner freighting; Chartering-Types, principles and practices; Development in sea transportation-Unitization, containerisation, inter and multimodal transport; CFC and ICD.
Air transport: Set up for air transport and freight rates; Carriage of Goods by sea -Role and types of cargo intermediaries.
Warehousing and inventory management: Reasons for warehousing; Warehousing evaluation and requirements; Warehousing location strategies; Inventory management principles and approaches; Inventory categories -EOQ, LT, ICC; Material management systems and techniques – JIT purchasing, manufacturing and in-bound logistics; Packing and marking; Control and communication.

Unit IV-IT Enabling Logistics and Supply Chain: Technology in logistics – EDI, bar Coding, RFID etc., data warehousing, electronic payment transfers; Business management systems; TRADITIONAL ERP, SPECIAL ERP, MR, DRP, PDM, EIP, CPFR, WMS, TMS; Re-engineering the supply chain- Future directions.

Unit V-Trends and Challenges in logistics and supply chain management: Third party logistic outsourcing –challenges and future directions.

Note: Use relevant case studies to support learning in the class.

<div align="center">49</div>

Suggested Readings:

1. Ballau, R.H., *Business Logistics Management*, Prentice Hall, Englewood Cliffs.
2. Christopher, M., *Logistics and Supply Chain Management*, Prentice Hall.
3. Murphy, Paul R. and Donald F. Wood, Contemporary Logistics, Prentice Hall.
4. Shapiro, R*., Logistics Strategy: Cases and Concepts*, West Publishing, St. Paul.
5. Coughlan, A.,Anderson, E. and Louis W. Stern, *Marketing Channels*, Prentice Hall.
6. Handfield and Nicholas, Jr., Introduction to Supply Chain Management, Prentice Hall.
7. Jhon J Coyle, C. Jhonand Langley,Brian J Gibs, *Logistics approach to Supply Chain Management*, Cengage Learning.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester III
(Major Group- Human Resource Management)

Course MJ 321: HUMAN RESOURCE DEVELOPMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of the course is to make student aware of the concepts, techniques and practices of human resource development. This course intends to make students understand the applicability of these principles and techniques in an organization.

Contents:
Unit I-Introduction to Human Resource Development: Concept and evolution; Relationship between human resource management and human resource development; HRD mechanisms, processes and outcomes; HRD matrix; HRD interventions; Roles and competencies of HRD professionals.

Unit II-HRD Process: Assessing HRD needs; Designing and developing effective HRD programs; Implementing HRD programs; Evaluating HRD programs.

Unit III-Learning and HRD: Maximizing learning; Individual differences in learning process; Learning strategies and styles; Principles of learning; Learning and motivation; HRD culture and climate.

Unit IV-HRD Activities and Applications: HRD for Workers; HRD mechanisms for workers; Role of trade unions; Employee training and development- Process, methods, and types; Coaching, counselling and performance management; Career management and development; Organization development.

Unit V-HRD in Organisations, Trends and Practices: Select cases for HRD Practices in Government organisations, defence, police, private sectors and public sectors units; HRD audit; Balanced scorecard; People capability maturity model; Integrating HRD with technology; Employer branding and other recent trends; Future of HRD.

Note: Lectures should be supplemented with the case studies.

Suggested Readings:

1. Werner J. M., DeSimone, R.L., *Human resource development*, South Western.
2. Nadler, L., *Corporate human resources development,* Van Nostrand Reinhold.
3. Blanchard, P.N., Thacker, J.W., Anand Ram, V., *Effective training, systems, strategies, and practices*, Pearson Education.
4. Raymond, N. and Kodwani, A.D., *Employee training and development,* McGrawHill Education India.
5. Mankin, D., *Human resource development*, Oxford University Press India.
6. Haldar, U. K., *Human resource development,* Oxford University Press India.
7. Rao, T.V., *Future of HRD*, Macmillan Publishers India.
8. Rao, T.V., *HRD score card 2500: Based on HRD audit,* Response Books, SAGE Publications.

9. Rao, T.V., *Hurconomics for talent management: Making the HRD missionary business-driven*, Pearson Education.

10. Curtis, B., Hefley, W. E., Miller, S. A., *The people capability maturity model: Guidelines for improving workforce,* Pearson Education.

11. Kaplan, R.S., and Norton, D.P. 1992, The Balanced Scorecard: Measures that drive performance, *Harvard Business Review.*

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester III
(Major Group-Human Resource Management)

Course MJ 322: MANAGEMENT OF INDUSTRIAL RELATIONS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of the course is to make student practically equipped to manage the industrial relations in the light of numerous augmentations in the area of Industrial relations. The course will make them understand the importance of industrial relations for an organisation and the ways and means to create industrial harmony at different levels of organisation.

Contents:
Unit I- Structure and Evolution of Industrial Relations: Concept, Nature and models of IR: Unitarist, Pluralist, Dunlop's and Marxist perspectives of IR, Industrial relations system in India: Structure and its evolution. Major contemporary developments in global economy and polity and their impact on industrial relations scenario in India.

Unit II- Industrial Conflict and Disputes Resolution: Industrial Relations Machinery in India, Provisions under the Industrial Disputes Act, 1947; Authorities under the Act, Reference of disputes to boards, courts or Tribunals, Procedures, Powers and duties of Authorities, Strikes, Lockouts, Layoff and retrenchments, unfair labour Practices, Penalties.
Disputes resolution methods, Forms of industrial conflicts, Labour turnover, workplace practices and cooperation. Dynamics of conflict and collaboration. Trends in industrial conflict. Nature, Causes and Types of industrial disputes: handling interest and rights disputes—Statutory and Non-statutory—Linking IR Strategy and HRM strategy.

Unit III- Trade Unionism, Negotiations and Collective bargaining: Provisions of Trade Union Act, 1926, Definitions, Legislations of Trade unions, rights and Liabilities of Registered Trade Union, Regulations, Penalties and procedure. Management of labour, management control strategies, business strategies and industrial relations, Role of market conditions, Structure for management of Industrial relations; Collective bargaining: Nature and functions; Types of bargaining; Collective bargaining in the Indian context; Negotiating a collective bargaining agreement.

Unit IV- Industrial Relations and HRM performance: Unions and productivity; Industrial relations climate and performance; the conciliation and arbitration system and performance; labour market and economic performance; Nature of grievances and grievance procedure. Handling employee grievances-Model grievance procedures. Industrial indiscipline. Disciplinary enquiries: an overview. Salient features of Industrial Employment (Standing Orders) Act, 1946.Disciplinary action and termination of employment contract.

Unit V- Industrial Democracy: Concept and scope of industrial democracy, Workers' participation: Strategy, practices, behavioural science input/contribution and models. Rationale for participation, Issues in participation, strategies for making participation effective. Emerging trends in Union-Management relations. Technology and industrial relations. Principles of comparative analysis, variables of comparative analysis (culture, values, ideologies, politico -economic structure) Experience of UK, Yugoslavia, West Germany, Scandinavian countries and Japan.

Note: Cases to supplement learning from the course.

Suggested Readings:

1. Venkataratnam, C. S. *Industrial Relations: Text and Cases.* Delhi. Oxford University Press.
2. Michael Salamon, *Industrial Relations—Theory & Practice*. London. Prentice Hall.
3. Bray, M, Deery.S, Walsh.J, and Waring P, *Industrial Relations : A Contemporary Approach*, Tata Mc Graw Hill.
4. Dwivedi, R.S., *Managing Human Resources: Industrial Relations in Indian Enterprises*, New Delhi, Galgotia Publishing Company.
5. Edwards, P. *Industrial Relations: Theory and Practice in Britain*. U.K. Blackwell Publishing.
6. Kaufman, B. *The global evolution of industrial relations: events idea and the IIRA*. Geneva: International Labour Office.
7. Singh, P., & Kumar, N. *Employee Relations Management.* New Delhi: Pearson Education India.
8. Ramaswamy, E.A. The Rayon Spinners —*Strategic Management of Industrial Relations*, New Delhi. Oxford University Press.
9. Mamoria C.B. & S. Mamoria: *Dynamics of Industrial Relations in India.* Mumbai. Himalaya Publishing House.
10. Niland R. et. al . *The Future of Industrial Relations*, New Delhi. Sage.
11. Sen, R. *Industrial relations: text and cases,* New Delhi. Macmillan Publishers.
12. Rowley, C., & Warner, M. *Globalizing international human resource management.* New York: Routledge.
13. Zeytinoglu, I. U. *Effects flexibility in workplace on workers: Work environment and the unions*. Geneva: International Labour Office.
14. www.workersparticipation.eu
15. www.ilo.org

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Major Group- Human Resource Management)

Course MJ 423: STRATEGIC HUMAN RESOURCE MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To impart knowledge about the strategic aspect of human resource management. This paper also intends to make the students understand the linkage between human resource strategies and corporate strategies.

Contents:
Unit I-Introduction: Concept and context of strategic human resource management (SHRM); Corporate strategy and SHRM; Evolution of SHRM; SHRM & HR; Challenges in SHRM; Resource based view of a firm; Competencies of HR professionals.

Unit II-HR Strategies: Strategic HR planning and acquisition: Recruitment and selection; Strategic training and development; Reward and compensation strategy; Corporate strategy and career systems; Employee separation and retention management, retrenchment; Strategic approach to industrial relations; Managing workforce diversity.

Unit III-Implementing Strategic Human Resource Management: Identifying strategic positions; Human resource analytics; Employee engagement; Matching culture with strategy; Behavioural issues in strategy implementation.

Unit IV-Linking SHRM to Competitive Success and Corporate Strategy: SHRM for competitive advantage; HC Bridge Model and Decision science model; Tools for work analysis and talent strategies; HR implications of mergers and acquisitions; Outsourcing and its HR implications.

Unit V- Trends and Issues in SHRM: Alignment of HR strategies and the impact on business performance; HR metrics; Human resource strategy in international context; Future of SHRM.

Note: Lectures should be supplemented with the case studies.

Suggested Readings:

1. Das P., *Strategic human resource management: A resource driven perspective*, Cengage Learning India.
2. Greer, C.R., *Strategic human resource management: A general managerial approach*, Pearson Education.
3. Paul B., *Strategic human resource management*, McGrawHill Education.
4. Armstrong, M., *Armstrong's handbook of strategic human resource management,* Kogan Page.
5. Mello J. A., *Strategic management of human resources*, South Western.
6. Schuler, R. S., and Jackson, S. E., *Strategic human resource management,* Wiley India.

Note: Latest edition of the readings may be used.

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Master of Commerce
Semester IV
(Major Group- Human Resource Management)

Course MJ 424: COMPENSATION MANAGEMENT AND EMPLOYEE WELFARE LAWS

Marks: 100 (Theory= 70, Internal Assessment=30)

Objective: The course is designed to promote understanding of issues related to compensation management in corporate sector and public services and to impart skill in designing compensation management system, policies and strategies, apart from promoting understanding of legal issues in the administration of compensation, welfare and social security.

Contents:
Unit I- Compensation Management and Employees Welfare: Compensation management process, Forms of pay, Financial and non-financial compensation. Compensation Strategies, Assessing job values & relativities; Pay structures; Designing pay levels, mix and pay structures, construction of optimal pay structure. Paying for performance, skills and competence. International pay systems: comparing costs and systems; Strategic market mind set; Expatriate pay. Concept and Rationale of Employees Welfare.

Unit II-The Payment of Bonus Act, 1965: Objects; Scope and Application; Definitions; Calculation of amount payable as Bonus; Eligibility and Disqualifications for Bonus; Minimum & maximum Bonus; Set on & Set off of Allocable Surplus; Application of Act in Establishment in Public Sector; Bonus linked with Production or Productivity

Unit III- The Payment of Wages Act, 1936: Objects; Application; Responsibility for payment of wages; Fixation of wage periods; time-limits; Deduction from wages; Remedies available to worker, Powers of authorities, Penalty for offences.

Unit IV-The Minimum Wages Act, 1948: Objects; Application; Minimum Fair and Living Wages; Determination of minimum wage; Taxation of minimum wage; Advisory Board; Remedy to worker for non-payment of minimum wages.

Unit V-The Workmen's Compensation Act, 1923: Objects; Employer's liability for compensation; Amount of compensation; Distribution of compensation; Notice and claims, remedies of employers against stranger; Procedures in proceedings before Commissioner.

Unit VI- The Maternity Benefit Act, 1961: Definitions, Employment of, or work by, women prohibited during certain periods, right to payment of maternity benefits, notice of claim of maternity benefit and payment thereof, Leaves, Dismissal during absence of pregnancy, forfeiture of maternity benefits.

Note: Case laws in respect of recent trends and administration of the Acts are required to be done in all units.

Suggested Readings:

1. Belchor, David W. "*Compensation Administration*", Prentice Hall, Englewood Cliffs. NT.
2. Henderson, R.I. *Compensation Management in a Knowledge Based World.* New Delhi: Pearson Education
3. Milkovich.G; Newman.J and Ratnam, C.S.V, *Compensation*, Tata Mc Graw Hill, Special Indian Edition.
4. Armstrong, M. & Murlis, H. *Reward Management: A Handbook of Salary administration*, London: Kegan Paul
5. Sharma, J.P. *An Easy Approach To Company And Compensation Laws.* New Delhi: Ane Books Pvt Ltd.
6. Malik, P.L. *Handbook of Labourer and Industrial Law*, Eastern Book Company.
7. Government of India Report of the National Commission on Labour Ministry of Labour and Employment, New Delhi.

Relevant bare Acts and Rules.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Minor Group- Tax)

Course MN 331: PRINCIPLES AND PRACTICE OF TAXATION AND INDIAN TAX SYSTEM

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To familiarize and update the students with the basic principles of taxation, Structure of Indian Taxation system and provisions of indirect tax.

Contents:
Unit I-Introduction: Canons of taxation, Tax-GDP Ratio: Meaning, Significance & Determinants. Trends in Tax- GDP Ratio. Features of a good taxation system, Tax Equity: Benefit Principle of Taxation; Ability-to-pay principle of taxation. Tax Capacity & Tax Effort, Tax bases and tax policy – Determinants of tax yield – Classification of taxes: Direct and indirect taxes (Relative Roles of Direct and Indirect Taxes in Indian Economy) OECD classification; Progressive, proportional and regressive taxes; Ad-valorem and specific taxes.

Unit II- International Double Taxation: Assignment Rules of Foreign Income- Source Versus Residence; Methods to alleviate international tax duplication: Exemption, Tax Credit Method, Bilateral Tax Treaty, Multilateral Tax Treaty, OECD Model & United Nations Model- Tax Convention, International Tax Avoidance and Evasion; Transfer Pricing; Tax Heavens, Tax Treaty Shopping – Anti Avoidance Measures. Indian Law on Double Tax Relief.

Unit III- Incidence of Taxation: Types of tax incidence, Factors determining extent of tax shifting-taxation and efficiency: Excess Burden of Taxation; Administrative Costs; Compliance Costs. Distribution of Tax Burden, - Buoyancy and elasticity of tax revenue-Tax evasion in India, causes and consequences of tax evasion, Methods to curb tax evasion, Tax Incentives: Rationale, benefits and costs of tax incentives, forms of tax incentives: Tax Holidays, investment allowance, deductions, reinvestment incentives etc.

Unit IV- Constitutional Provisions Pertaining to Taxes: Rationale for constitutional arrangements. Distribution of taxation powers between the Center and States in the constitution of India; Restrictions on the taxation powers of the States; sharing of Central taxes. Recommendations of the Thirteenth Finance Commission.

Unit V- Tax Reforms in Direct and Indirect Taxes: Issues & Challenges, Value Added Tax, Goods & Service Tax, Direct Tax Code.

Unit VI- **Tax treatment of capital gains:** exemption, presumptive tax, Tax amnesties.

Note: Some case studies involving the learning from the course.

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Suggested Readings:

1. Musgrave. Richard and Peggy Musgrave, *Public Finance in Theory and Practice*, New York: McGraw Hill Book Company.
2. Sury, M.M. *Fiscal Policy Development in India: 1947 to 2007*, Indian tax foundation in association with New Century publications, New Delhi.
3. Peerzode, Sayal Afzal, *Economics of Taxation*, Atlantic Publishers& Distributors Pvt. Ltd.
4. Goode. Richard, *Government Finance in Developing Countries*, New Delhi. Tata –McGraw Hill publishing Company Ltd.
5. Government of India, Ministry of Finance, *Report of the Indirect Taxation Enquiry Committee* (Chairman, L. K. Jha).
6. Government of India, Ministry of Finance, Speeches of Union Finance Ministers, 1947-48 to 1984-85 (New Delhi, 1984).
7. Singhania. Vinod K, *Direct Taxes: Law and Practice* (Delhi: Taxmann Publications (p)

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Minor Group- Tax)

Course MN 432: CORPORATE TAX STRUCTURE AND PLANNING

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To familiarize the student with latest provisions of the Indian Corporate tax laws and related judicial pronouncements having implications for corporate tax planning.

Contents:
Unit I- **Introduction of Tax Planning:** Meaning of tax planning and management, tax evasion and tax avoidance; Nature and scope of tax planning and management in the corporate sector; Justification of corporate tax planning and management.

Unit II- Assessment of Companies: Residential Status and incidence of Tax, Computation of corporate tax: Carry forward and set off of losses in the case of certain companies under Sec. 79 of Income-tax Act, 1961; Deductions available to corporate assessee, Computation of taxable income of companies; Computation of amount of corporate tax liability; Minimum Alternate Tax; Tax on distributed profits of domestic companies; Tax on income distributed to unit holders.

Unit III- Tax Planning and Specific Management Decisions: Implications of Tax concessions and incentives for corporate decisions in respect of setting up a new business, location of business and nature of business.

Unit IV-Tax Planning and Financial Management Decisions: Capital structure decisions; Dividend Policy; Bonus Share; Investments and Capital Gains. Owning or leasing of an asset; purchase of assets by installment system or Hire System; Purchase of an asset out of own funds or out of borrowed capital; manufacturing or buying; Repairing, replacing, renewing or renovating an asset; Sale of assets used for scientific research; Shutting down or continuing operations. Private equity

Unit V- Business Reorganisation: Tax Planning in respect of amalgamation or de-merger of companies, Slump sale, conversion of a firm into a company. Conversion of Sole Proprietorship into Company, Conversion of company into Limited Liability Partnership.

Unit VI- Transfer Pricing: Overview of Indian transfer pricing

Unit VII– Foreign Collaboration and Double Taxation Relief: Foreign collaborations and incidence of taxation on domestic companies; provisions for relief in respect of double taxation.

Note: Relevant case studies to be discussed in the class.

Suggested Reading:
1. Srinivas.E.A, *Corporate Tax Planning*, Tata McGraw Hill,
2. Singhania,Vinod. K,*Taxmann's Direct Taxes, Law & Practice*.
3. Ahuja. Girish&Ravi Gupta, *Bharat's Professional Approach to Direct Taxes, Law & Practice,* Bharat Law House Pvt. Ltd.
4. Lal. B. B & N. Vashisht, *Direct Taxes Income Tax, Wealth Tax and Tax Planning.*
5. Taxman, *The Tax and Corporate Law Weekly*.
6. Bhagmati Prasad, *Direct Taxes And Laws And Practice,* Wishwa Prakashan,

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Minor Group- Law)

Course MN 341: CORPORATE LAWS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: To acquire knowledge and develop understanding of the regulatory framework of companies with reference to various provisions of the Companies Act, 2013 and a number of other corporate laws.

Contents:
Unit I- Historical Background of Company Law: Origin and Growth of Company Law in England: Commendas and Societas; Formation of East India Company; Enactment of the Bubble Act, 1719; Joint Stock Companies Act, 1844 (*Joint Stock Companies Act, 1850 in India*); Limited Liability Act, 1855; Companies Act, 1862 (*Companies Act, 1866 in India*); Companies Act, 1908 (*Indian Companies Act, 1913*); Companies Act, 1948 (*Companies Act 1956 in India*).

Unit II- Company and Its Formation: Lifting of corporate veil**;** types of companies; one person company, producer company; association not for profit; illegal association; formation of company – promoters, their legal position, pre-incorporation contract and provisional contracts**;** memorandum of association; articles of association; doctrine of constructive notice and indoor management; prospectus and book building; postal ballot; issue, allotment and forfeiture of shares, transmission of shares, buyback and provisions regarding buyback; issue of bonus shares**;** online registration of a company.

Unit III- Management and Control of Companies: Directors; classification of directors, women directors, independent directors; disqualifications, director identity number (DIN); appointment, legal positions, powers and duties, removal of directors; key managerial personnel, managing director, manager; managerial remuneration; meetings of shareholders and board- kinds, convening and conduct of meetings.

Unit IV-Accounts and Audit: Books of accounts; online filing of documents; dividend provisions, declaration and payment of dividend, treatment of unpaid and unclaimed dividend, transfer of unpaid and unclaimed dividend to investor education fund; auditors-appointment, resignation and removal; qualification and disqualification; auditor's report; inspection, inquiry and investigation, compromises, arrangements and amalgamations; prevention of oppression and mismanagement; concept and modes of winding up.

Unit V- Depositories Act 1996: Definitions; rights and obligations of depositories; participants, issuers and beneficial owners; inquiry and inspections; penalty.

Unit VI- SEBI Act, 1992: Formation and meetings of the SEBI; functions and powers of SEBI in relation to securities markets; prohibition of manipulative and deceptive devices; insider trading and substantial acquisition of securities or control; guidelines for securities issues.

Note: Case Studies involving issues in corporate laws are required to be discussed.

Suggested Readings:

1. Hicks, Andrew & Goo S.H., *Cases and Material on Company Law,* Oxford University Press.
2. Kershaw, David, *Company Law in Context*, Oxford University Press, UK.
3. Gowar, LCB, *Principles of Modern Company Law*, Stevens & Sons, London.
4. Hanningan, Brenda, *Company Law,* Oxford University Press, UK.
5. Sharma, J. P, *Corporate Laws*, Ane Books Pvt Ltd, New Delhi.
6. Bhandari, Munish, *Professional Approach to Corporate Laws and Practice*, Bharat Law House, New Delhi
7. Ramaiya, *A Guide to Companies Act*, Wadhwa and Company Nagpur
8. Kannal, S., & V.S. Sowrirajan, *Company Law Procedure*, Taxman's Allied Services (P) Ltd., New Delhi
9. Course material of the Institute of Company Secretaries of India on Company Laws.
10. *Bharat's Companies Act 2013*, Bharat Law House, New Delhi

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Minor Group-Law)

Course MN 442: INDUSTRIAL LAWS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The purpose of this course is to enable the students to acquire knowledge and understanding of prominent labour and industrial laws.

Contents:
Unit I-Employees Provident Fund & Miscellaneous Provisions Act, 1952: Definitions; schemes under the Act – Employees' Provident Fund Scheme, Employees' Pension Scheme, 1995; Employees' Deposit Linked Insurance Scheme**;** case laws.

Unit II-Employees State Insurance Act, 1948: Objects and applicability of the scheme; definitions-personal injury, factory, manufacturing process, wages, partial and permanent disablement; ESI corporation; standing committee and medical benefit council; contributions; adjudication of dispute and claims, benefits; case laws.

Unit III-Factories Act, 1948: Definitions; authorities under the Factories Act; health; safety; provisions relating to hazardous processes; welfare; working hours of adults; employment of young persons; annual leave with wages; penalties and procedure; case laws.

Unit IV- The Industrial Disputes Act, 1947: Objects; authorities for settlement of industrial disputes; reference of industrial disputes, procedure, powers and duties of authorities; settlements and awards; strikes, lock-outs, lay-off, retrenchment, transfer and closure; unfair labour practices.

Unit V-Payment of Gratuity Act, 1972: Applicability and non- applicability of the Act; definitions-employee, employer, continuous service; payment of gratuity; forfeiture of gratuity; employer's duty to determine and pay gratuity; recovery of gratuity; penalties; case laws.

Unit VI-Trade Unions Act, 1926: Objects; registration of trade unions; rights and liabilities of registered trade unions; privileges of a registered trade union; immunity from criminal and civil proceedings; penalties; case laws.

Unit VII-Employee's Compensation Act, 1923: Definitions- dependent, employer, partial and total disablement, workmen, injury, accident; employer's liability for compensation; amount of compensation; contracting; commissioner; case laws.

Note: Cases and problems involving issues in industrial laws are required to be discussed in the class.

Suggested Readings:

1. Malik, K.L., *Industrial Laws and Labour Laws*, Eastern Book Company, Lucknow.

2. Kumar, H.L., *Digest of Labour Cases*, Universal Law Publishing Co P Ltd, New Delhi.
3. Srivastava, S.C., *Industrial Relations &Labour Laws,* Vikas Publishing House (P) Ltd.
4. Sharma, J.P., *Simplified Approach to Labour Laws,* Bharat Law House (P) Ltd., New Delhi.
5. Sharma, J.P., *Industrial Laws*, Ane Books Pvt. Ltd, New Delhi.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Minor Group -Accounting)

Course MN 351: STRATEGIC COST MANAGEMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of this course is to provide students the adequate knowledge of modern cost management techniques and to enable them apply these techniques for managing a profitable and competitive enterprise.

Contents:
Unit I: Cost Management-Nature; Cost Management System; Strategic Cost Management (SCM); SCM and Strategy; Components of SCM.
Activity-Based Management [ABM]: Concept and Uses; Relationship between Activity – Based Costing and ABM; Operational ABM and Strategic ABM; Techniques of ABM; Implementation Steps in ABM.

Unit II: Life Cycle Costing-Meaning and Benefits; Product Life Cycle and Pricing Decisions; Life Cycle Budgeting.
Target Costing: Concept; Target Costing and Target Pricing; Key Principles of Target Costing; ABC and Target Costing; Target Costing Process; Market Driven Costing, Product Level Costing, Component Level Costing, Chained Target Costing; Target Costing and Cost Management; Role of Value Engineering in Target Costing.

Unit III: Kaizen Costing- Meaning; Implementation Steps in Kaizen Costing; Target Costing and Kaizen Costing; General Kaizen Costing and Item Specific Kaizen Costing; Bench Marking.
Total Quality Management(TQM): Meaning and Characteristics; Types of Quality Costs; Traditional and Modern View of Quality, Measuring Quality Costs; Reporting Quality Costs; Success Factors for TQM; Implementing TQM; Quality Cost Information and Managerial Decision Making.

Unit IV: Pricing Strategies- Factors Influencing Pricing Decisions; Short run Vs. Long Run Pricing Strategy; Cost-Based Pricing; Economic Approach to Pricing; Pareto Analysis in Pricing Decisions.
Activity-Based- Budgeting (ABB): ABB and Traditional Budgeting; ABB Process; Capacity Utilization; Role of ABB in Cost Management.

Unit V: Productivity and Business Process Re-Engineering (BPR)- Measuring Productivity; Partial Productivity Measurement; Total Productivity Measurement; Measuring Changes in Activity and Process Efficiency; Productivity in Service Firms and Not-For-Profit Organizations.
Process Reengineering (PR): Concept; Importance; Issues in PR.
Value Chain Analysis: Concept; Value Chain Linkages; Internal Linkages; Supplier Linkages; Customer Linkages; Role of Value-Chain in Decision Analysis.

Unit VI: Just-In-Time (JIT) Inventory Management- Traditional (Push) Approach to Inventory Management; JIT (Pull) Approach; JIT Purchasing; JIT and Quality Control; JIT and Cost Management;

Performance Evaluation in JIT Environment; Changes needed to Implement JIT Manufacturing ; Accounting Implications of JIT; JIT Limitations.

Theory of Constraints (TOC): Concept; Operational Measures; Steps for Improving Performance; Internal Constraint; External Constraint; TOC and Cost Management; Uses of TOC; ABC and TOC.

Suggested Readings:

1. Edward J. Blocher, Kung H. Chen, Gary Cokins and Thomas W. Lin, *Cost Management: A Strategic Emphasis*, McGraw Hill Education (India) Ltd.
2. Don R – Hansen and Maryanne M. Mowen, *Cost Management, Accounting and Control*, Cengage Learning (India) Ltd.
3. Ronald W. Hilton, Michael W. Maher and Frank A. Selto, *Cost Management: Strategies for Business Decisions*, McGraw Hill Irwin.
4. Robert S. Kaplan and Robin Cooper, *Cost and Effect*, Harvard Business School Press.
5. John K. Shank and Vijay Govindarajan, *Strategic Cost Management*, The Free Press.
6. Leslie G. Eldenburg and Susan K. Wolcott, *Cost Management*, John Wiley and Sons.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Minor Group -Accounting)

Course MN 452: ACCOUNTING THEORY AND FINANCIAL REPORTING

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The course aims to provide knowledge to the students about developments in accounting theory and financial reporting, and understanding of accounting and reporting issues at the national and international level.

Contents:
Unit I- Accounting Theory: Nature; Classifications of Accounting Theory; Different Approaches to Theory Construction; Factors Influencing Accounting Environment; Measurement in Accounting.
Accounting Principles: Generally Accepted Accounting Principles; Selection of Accounting Principles; AS-1 Disclosure of Accounting Policies; Indian Accounting Standards.

Unit II- Income Concepts: Different Concepts of Income Measurement; Recipients of Net Income.
Accounting Standard Setting: Benefits; Standard Setting By Whom; Comparison of Standard Setting in India, USA and U.K.

Unit III- Financial Reporting: Nature and Objectives; Benefits; General purpose and Specific Purpose Report; Qualitative Characteristics of Accounting Information; Conceptual Framework- FASB and IASB.

International Financial Reporting Standards (IFRSs): Role of IASB; Arguments for Global Convergence; Required Disclosure as per IFRSs; Achievements of IASB and Obstacles in Convergence; Difference between IFRSs and Indian Accounting Standards; US GAAP.

Unit IV- Issues in Corporate Financial Reporting: Accounting for Changing Prices; Segment Reporting

Unit V- Interim Reporting**;** Foreign Currency Translation.

Unit VI- Human Resource Accounting; Social Reporting; Financial Reporting in Not-For-Profit and Public Sector Organizations.

Suggested Readings:

1. E.S. Hendriksen, *Accounting Theory*, Richard D. Irwin.
2. M.W.E. Glautier and B. Underdown, *Accounting Theory and Practice.*
3. Ahmed Riahi Belkaoui, *Accounting Theory*, Thomson Learning.
4. Henry I- Wolk, Jere R. Francis and Michael G- Tearney, *Accounting Theory: A Conceptual and Institutional Approach,* South Western Publishing Co.
5. Robert Bloom and Pieter T. Elagers, *Accounting Theory and Policy*, Harcourt Brace Joranovich.
6. L.S. Porwal*, Accounting Theory*, McGraw Hill Education (India) Ltd.
7. Jawahar Lal, *Accounting Theory and Practice*, Himalaya Publishing House, New Delhi.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester III
(Minor Group-International Business)

Course MN 361: INDIA'S FOREIGN TRADE AND INVESTMENT

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The objective of this course is to acquaint the students with structure and policy framework of India's foreign trade and investments.

Contents:
Unit I – Introduction to India's Foreign Trade and Investment: Pattern and Structure of India's foreign trade; India's trade in service; Terms of trade; India on the world trading map; Analysis of thrust export products and markets.
India's foreign investment policy and flows: India as an investment destination; India's investments abroad – pattern and structure; Indian Joint ventures in foreign countries and their operations.

Unit II - Foreign Trade Policy and Economic Relations: Policy making body and regulatory framework; Trends and developments in India's foreign trade policy; Bilateralism and Multilateralism in India's trade relations; India's trade and economic relations with EU and other regional groupings; India and regional economic cooperation in South Asia; India's Bilateral Investment Treaties and DTAAs (Double Taxation Avoidance Agreements).

Unit III - Export Promotion Measures and Institutional Arrangements: Export promotion measures and schemes; Export and trading houses, Import facilities for exports; Export processing/special economic zones (EPZs/SEZs) and 100% EOUs – Policy framework and operational aspect.
Export promotion councils, DIPP; Commodity boards/export development authorities; Infrastructure Support – Transportation and warehousing infrastructure, Indian ports and shipping system; Foreign Trade Finance and Insurance; Sources and Schemes of Foreign Trade Finance.

Unit IV - Foreign Exchange facilities and Regulations: Foreign exchange facilities and exchange rate mechanism; Regulatory framework – FEMA and its objectives and provisions; Other acts and regulations.

Unit V - Balance of Payment Account: India's Balance of Payment account and adjustment policies; foreign reserves and debt situation.

Suggested Readings:

1. Ministry of Commerce*, Export Import Policy*, Government of India, New Delhi.
2. Ministry of Commerce, *Handbook of Procedures*, Vols. I and II, Government of India, New Delhi.
3. *Customs and Excise Laws*, Various issues.
4. Nayyar Deepak, *Foreign Trade Sector, Planning and Industrialisation in India*, in Terance J. Byres, The State Development Planning and Liberalisation in India, Delhi, 1997.

5. Meier G.M., Trade Policy and Development, in Scott Maurice and Deepak Lal, *Public Policy and Economic Development* – Essays in Honour of lan Little, Oxford.

6. Nayyar Deepak, *India's Export Performance 1970-85, Underlying Factors and Constraints,* in Robert E.B. Lucas and Gustav F. Pipanek (ed.), *Indian Economy Recent Development and Future Prospects,* New Delhi.

7. Economic Survey– Compiled by the Government of India, Ministry of Finance, Department of Economic Affairs – Latest Edition.

Note: Latest edition of the readings may be used.

Master of Commerce
Semester IV
(Minor Group- International Business)

Course MN 462: MANAGEMENT OF INTERNATIONAL BUSINESS OPERATIONS

Marks: 100 (Theory = 70, Internal Assessment = 30)

Objective: The course intends to acquaint the students with the management of international business operations of a business firm.

Contents:
Unit I – The Strategy of International Business: Global Expansion, Profitability and Growth; Complexities and issues in International Business Management; Approaches to international management; Cross-cultural values and business management; International management orientation; International business management -A strategic perspective.

Unit II – Planning for Global Expansion: Environmental scanning and monitoring; Resource allocation and portfolio compositions of a global firm; Linkages and synergies among business units across borders; Locus of decision making; Headquarter – subsidiary relationships in international business enterprises; International management information system.

Unit III - International Production, Outsourcing and Location Decisions: Procurement for international operations – international quality standards; Logistics and Supply chain management.

Unit IV - International Marketing Management: Globalization of Markets and Brands; International Market segmentation, targeting and positioning; International marketing mix planning – Product, price, promotion and distribution decisions.

Unit V - Management of International Financial Operations: International capital budgeting and portfolio investment decisions; International capital structure decision, International working capital management.

Unit VI - International Human Resource Management: Selection, training and development of people in international firms; Compensation and reward systems among international firms; Motivation and leadership in international firms; International Labour Relations.

Unit VII – Accounting and Tax Issues in International Business: Evolution of International Accounting Standards (IFRSs); Issues and Challenges; International Double Taxation; Transfer Pricing; Tax Treaty Shopping; Tax havens.

Suggested Readings:

1. Danoes, John D. Radebaugh, Lee H., and Daniel P. Sullivan, *International Business: Environment and Operations,* Prentice Hall.

2. Griffin, Ricky W. and Pustay, Michael W, *International Business: A Managerial Perspective*, Prentice Hall.

3. Hill, Charles, W.L., *International Business*, McGraw Hill Company, New York.

4. Cherunilam, F., *International Business Text and Cases*, PHI.

5. Ball, Donald, Wendall H. McCulloch, Michael Geringer, Michael S. Minor and Jeanne M. McNett, International Business: The Challenge of Global Competition, McGraw Hill Co.

Note: Latest edition of the readings may be used.