#### **COURSE SPECIFIC OUTCOMES**

### **ENVIRONMENTAL STUDIES**

The course will empower the undergraduate students by helping them to:

- Gain in-depth knowledge on natural processes and resources that sustain life and govern economy.
- Understand the consequences of human actions on the web of life, global economy, and quality of human life.
- Develop critical thinking for shaping strategies (scientific, social, economic, administrative, and legal) for environmental protection, conservation of biodiversity, environmental equity, and sustainable development.
- Acquire values and attitudes towards understanding complex environmental economic- social challenges, and active participation in solving current environmental problems and preventing the future ones.
- Adopt sustainability as a practice in life, society, and industry.

### **COMMERCE**

# B.Com (Hons)

### SEMESTER - I

## **Business Laws**

After completing the course, the student shall be able to:

- Understand basic aspects of contracts for making the agreements, contracts and subsequently enter valid business propositions.
- Be able to recognize and differentiate the special contracts and identify their appropriate usage at varied business scenarios.
- Equip the students about the legitimate rights and obligations under The Sale of Goods Act
- Enable with skills to initiate entrepreneurial ventures as LLP
- Understand the fundamentals of Internet based activities under The Information and Technology Act.

# Basics of Accounting (Generic Elective)

After completing the course, the student shall be able to:

- Gain an understanding of theoretical framework of accounting
- Explain the concept of accounting equation and accounting process
- Develop understanding of depreciation and inventory
- Understand financial statements of a company
- State the meaning, objectives and significance of different types of ratios.

### Financial Accounting

After completing the course, the student shall be able to:

- Understand the theoretical framework of accounting and to prepare financial statements
- Explain and determine depreciation and value of inventory
- Learn accounting for hire purchase transactions, leases, branches and departments
- Understand the concepts of partnership firm and prepare accounts for dissolution of a partnership firm
- Develop the skill of preparation of trading and profit and loss account and balance sheet using computerized accounting.

### SEMESTER - II

### Corporate Accounting

After completing the course, the student shall be able to:

- Develop an understanding of accounting for share capital and debentures
- Prepare financial statements of a company
- Develop an understanding of cash flow statements
- Understand the accounting for amalgamation and liquidation of companies
- Prepare consolidated balance sheet for Holding company

### Corporate Laws

After completing the course, the student shall be able to:

- Understand the regulatory aspects and the broader procedural aspects involved in different types of companies covering the Companies Act 2013 and Rules there under.
- Follow the basic legal documents and their usage essential for operations and management of company.
- Enable the students to synthesis company processes, meetings and decisions.
- Equip the students with framework of dividend distribution and role of auditors in a company.
- Comprehend and evaluate working of depositories and their functions in stock markets.

### Finance for Non-finance Executives (Generic Elective)

After completing the course, the student shall be able to:

- Understand the overview of finance, concept of time value of money as well as concept of risk & return
- Learn financial analysis with the aid of various financial statements & analyze capital budgeting process and techniques.
- Analyze cost of capital, capital structure and leverage
- Examine dividend & working capital dividend decisions
- Perform valuation of securities

## SEMESTER – III

### Personal Tax Planning

After completing the course, the student shall be able to:

• Understand the concept of tax planning, use the residential status to plan the scope of income and devise tax planning strategy in relation to agricultural income.

- Apply critical thinking and problem solving skills related to minimization of tax liability of individuals with respect to salary income and understand how to develop efficient pay packages
- Devise tax planning strategies in relation to house property and understand the presumptive scheme of taxation of computing business income.
- Use Indexation technique to reduce capital gains tax and learn about specific exemptions available from capital gains.
- Use deductions to reduce taxable income and use rebates to reduce tax liability.

# Management Principles and Applications

After completing the course, the student shall be able to:

- Understand the evolution of management and apprehend its effect on future managers.
- Analyze how organisations adapt to an uncertain environment and decipher decision making techniques managers use to influence and control the internal environment.
- Comprehend the changes happening in organisation structure over time.
- Analyze the relationship amongst functions of management i.e. planning, organizing, directing and controlling.
- Appreciate the changing dynamics of management practice.

## Human Resource Management

After completing the course, the student shall be able to:

- Understand basic nature and importance of human resource management.
- Analyze the current theory and practice of recruitment and selection.
- Realize the importance of performance management system in enhancing employee performance.
- Recommend actions based on results of the compensation analysis and design compensation schemes that are cost effective, that increase productivity of the workforce, and comply with the legal framework.
- Understand role of modern HRM in meeting challenges of changing business environment.

## Income Tax -Laws & Practice

After completing the course, the student shall be able to:

- Understand the basic concepts in the law of income tax and determine the residential status of different persons.
- Identify the five heads in which income is categorised and compute income under the heads 'Salaries' and 'Income from House Property'.
- Compute income under the head 'Profits and gains of business or profession', 'Capital gains' and 'Income from other sources'.
- Understand clubbing provisions, aggregate income after set-off and carry forward of losses, and deductions allowed under the Income Tax Act; and further to compute taxable income and tax liability of individuals and firms.
- Develop the ability to file online returns of income.

### E-Commerce

After completing the course, the student shall be able to:

• Understand the basics of E-commerce, current and emerging business models.

- Familarize with basic business operations such as sales, marketing, HR etc. on the web.
- Enhance the students' skills for designing and developing website.
- Identify the emerging modes of e-payment.
- Understand the importance of security, privacy, ethical and legal issues of ecommerce.

### Business Statistics (Generic Elective)

After completing the course, the student shall be able to:

- Acquire a fair degree of proficiency in comprehending statistical data, processing and analysing it using descriptive statistical tools.
- Gather knowledge about various probability concepts and distributions and their business applications.
- Understand the relationship between two variables using concepts of correlation and regression and its use in identifying and predicting the variables.
- Develop an understanding of the index numbers and their utility in daily life and stock market
- Become aware of the patterns revealed by the time series data and to use it to make predictions for the future.

### SEMESTER - IV

### Cost Accounting

After completing the course, the student shall be able to:

- Understand thoroughly the conceptual framework of Cost Accounting; identification of differences between different financial and cost accounting; cost concepts and elements of cost; preparation of cost sheet.
- Understand the accounting and control of material and labour cost.
- Develop ability to understand classification, allocation, apportionment and absorption
  of overheads in cost determination; under and over absorption of overheads; treatment
  of various item of overheads
- Develop ability to calculate the cost of products, jobs, contracts, processes and services after understanding the basic concepts and processes involved in them.
- Understand cost accounting book keeping systems and reconciliation of cost and financial account profits

### **Business Mathematics**

After completing the course, the student shall be able to:

- Comprehend the concept of systematic processing and interpreting the information in quantitative terms to arrive at an optimum solution to business problems.
- Develop proficiency in using different mathematical tools (matrices, calculus, linear programming, and mathematics of finance) in solving daily life problems.
- Acquire competence to use computer for mathematical computations, especially with Big data.
- Obtain critical thinking and problem-solving aptitude.
- Evaluate the role played by mathematics in the world of business and economy.

## Computer Applications in Business

After completing the course, the student shall be able to:

- Understand the various concepts and terminologies used in computer networks and internet and be aware of the recent developments in the fast changing digital business world.
- Handle document creation for communication.
- Acquire skills to create and make good presentations
- Make various computations in the area of accounting and finance and represent the business data using suitable charts. S/He should be able to manipulate and analyze the business data for better understanding of the business environment and decision making
- Understand and apply the various database concepts and tools in the related business areas with the help of suggested popular software.

# Entrepreneurship

After completing the course, the student shall be able to:

- Understand entrepreneurship as volition in context of India.
- Gather knowledge and ideas on the existing support system for entrepreneurial orientation.
- Understand enterprise formation process for gaining ideas as to creation of an enterprise for pursuing a career.
- Understand requirements of post-enterprise creation for effective operation of the business.
- Gain knowledge on available growth strategies for implementing effective suitable strategy for expansion and growth.

## E-Filing of Returns

After completing the course, the student shall be able to:

- Know the difference between e-filing and regular filing of Income tax returns and understand the circumstances when e-filling is mandatory.
- Understand the basic process of computing taxable income and tax liability, and know about various types of income tax return forms.
- Understand the concept of advance payment of tax and tax deduction at source and develop the ability of e-filing of TDS returns.
- Become aware of the basic framework and structure of GST, including the meaning of input tax credit and the process of its utilization.
- Know about various types of GST returns and their filing.

### SEMESTER - V

## Principles of Marketing

- Develop understanding of basic concepts of marketing, marketing philosophies and environmental conditions effecting marketing decisions of a firm.
- Understand the dynamics of consumer behaviour and process of market selection through STP stages.
- Understand and analyze the process of value creation through marketing decisions involving product development.

- Understand and analyze the process of value creation through marketing decisions involving product pricing and its distribution.
- Understand and analyze the process of value creation through marketing decisions involving product promotion and also to equip them with the knowledge of various developments in marketing area that may govern marketing decisions of a firm.

# Organisational Behaviour

After completing the course, the student shall be able to:

- Understand the development of organisational behavior and its importance in managing people at the workplace.
- Understand how individuals behave under different conditions and why individuals behave as they do.
- Appreciate different theories of motivation.
- Critically evaluate leadership styles and strategies.
- Critically evaluate the potential effects of organisation culture and stress on behavior in organisation so as to direct the same towards predetermined goals.

### Financial Markets, Institutions and Financial Services

After completing the course, the student shall be able to:

- Understand the meaning and scope of financial markets as well as institutions in India.
- Understand the concepts of Money Market and Capital Market
- Explain Commercial Banking and its Current developments.
- Explain concept of Non-Banking Financial Companies (NBFC's)
- Examine the Financial Services Industry

## Management Accounting

After completing the course, the student shall be able to:

- Understand thoroughly the conceptual framework of Management Accounting; identification of differences between different forms of accounting—Financial, Cost and Managerial; distinction between cost control and cost reduction.
- Understand the concept of marginal cost and marginal costing; preparation of income statements using absorption and variable costing; learning of cost-volume-profit analysis and break-even analysis using mathematical and graphical approaches; and the application in businesses.
- Understand the concept of relevant and irrelevant costs and make decisions related to different business situations using marginal costing and differential costing techniques.
- Understand budgetary control system as a tool of managerial planning and control; ability to prepare various types of budget. Ability to understand standard costing system as a tool of managerial control; calculation of variances in respect of each element of cost and sales; control ratios.
- Understand management accounting issues of Responsibility accounting, Divisional performance measurement and Transfer pricing.

### Fundamentals of Financial Management

- Explain the nature and scope of financial management as well as time value of money and risk return trade off
- Analyze capital budgeting process and capital budgeting techniques
- Estimate various capital structure theories and factors affecting capital structure decisions in a firm
- Critically examine various theories of dividend and factors affecting dividend policy
- Evaluate working capital requirement

### **Business Statistics**

After completing the course, the student shall be able to:

- Acquire a fair degree of proficiency in comprehending statistical data, processing and analysing it using descriptive statistical tools.
- Gather knowledge about various probability concepts and distributions and their business applications.
- Understand the relationship between two variables using concepts of correlation and regression and its use in identifying and predicting the variables.
- Develop an understanding of the index numbers and their utility in daily life and stock market.
- Become aware of the patterns revealed by the time series data and to use it to make predictions for the future.

### SEMESTER - VI

# Auditing and Corporate Governance

After completing the course, the student shall be able to:

- Differentiate between different aspects of auditing especially for internal check, internal control and for overall corporate governance.
- Understand the concept of corporate governance in organisations and its essence for management.
- Provide and assimilate information leading to failure of organisation and corporate scams.
- Comprehend the governance framework for an organisation provided by different regulatory bodies in India and Abroad.
- Recognise the essence of ethics in business.

### Goods & Service Tax and Custom Law

- Connect with the genesis of goods and services tax (GST), decipher the constitutional amendment carried out to install GST in India and comprehend the composition and working of GST council.
- Understand the meaning of supply under GST law, differentiate between intra-state and inter-state supply, comprehend rules related to the place of supply and compute the value of supply.
- Comprehend the utilization of input tax credit, and the reverse charge mechanism of paying GST and to know the procedure for claiming refund under GST law.
- Understand the provisions for registration under GST along with special provisions such as those related to anti-profiteering; avoidance of dual control; e-way bills and penalties.

• Know the basic concepts of Customs Act and to compute the assessable value for charging customs duty.

# Fundamentals of Investment

After completing the course, the student shall be able to:

- Explain investment environment and concept of return & risk.
- Understand bond valuation & role of credit rating agencies.
- Examine equity approaches.
- Analyze two securities portfolio using Harry Markowitz model, Calculating portfolio risk and return, explaining CAPM and evaluating Mutual Funds and Financial derivatives.
- Evaluate investors protection framework

#### International Business

After completing the course, the student shall be able to:

- Understand the process of globalization, its impact on the evolution and growth of
  international business and to appreciate the changing dynamics of the diverse
  international business environment.
- Analyze the theoretical dimensions of international trade and intervention measures adopted; to appreciate the significance of different forms of regional economic integration and to understand the concept of Balance of payment account and its components.
- Understand the significance of different forms of regional economic integration and to appreciate the role played by various international economic organisations such as the WTO, UNCTAD, IMF and World Bank.
- Familiarize students with the international financial environment, and get them acquainted with the basic features of the foreign exchange market its characteristics and determinants.
- Critically examine the concept and form of foreign direct investment, and to create awareness about emerging issues in international business such as outsourcing and ecological issues.

### Compensation Management

After completing the course, the student shall be able to:

- Acquaint with basic legal framework envisaged under the statutes for compensation and welfare of employees in different modes.
- Identify the internal and external environmental factors that have an impact on pay structure of an organisation.
- Understand the various principles involved and premise of the grant of bonus, wages, and minimum wages to workers.
- Understand international compensation rules to meet requirement of overseas workforce.
- Know various compensation laws to meet employee satisfaction.

## Financial Reporting & Analysis

After completing the course, the student shall be able to:

• Describe the conceptual framework of financial reporting have an understanding the components of financial statements

- Identify major disclosures to be made in the annual report by the listed companies
- Explain techniques of analysis of financial statements
- Analyze and interpret financial statements of companies using the case study method
- Gain understanding of emerging areas in financial reporting Accounting for E-commerce business, value added statements and Integrated Reporting

#### B.Com

### SEMESTER - I

# **Business Organisation and Management**

After completing the course, the student shall be able to:

- Understand dynamics of business organisations and management practices with respect to stakeholders.
- Understand varied perspectives related to business environment and entrepreneurship.
- Analyze how organisations adapt to an uncertain environment and decipher decision making techniques managers use to influence and control the internal environment.
- Analyze the relationship amongst functions of management i.e. planning, organizing, directing and controlling.
- Appreciate the change in working pattern of modern organisations.

# Financial Accounting

After completing the course, the student shall be able to:

- Build an understanding of theoretical framework of accounting and be able to prepare financial statements.
- Explain and determine depreciation and inventory value
- Develop understanding of accounting for hire purchase transactions and lease transactions
- Understand branch and departmental accounting
- Develop the skill of preparation of trading and profit and loss account and balance sheet using computerized accounting or prepare accounts for dissolution of a partnership firm

### SEMESTER - II

#### **Business** laws

After completing the course, the student shall be able to:

- Understand basic aspects of contracts for making the agreements, contracts and subsequently enter valid business propositions.
- Handle the execution of special contracts used in different types of business.
- Learn legitimate rights and obligations under The Sale of Goods Act.
- Acquire skills to initiate entrepreneurial ventures as LLP.
- Understand the fundamentals of Internet based activities under The Information and Technology Act.

## **Business Mathematics and Statistics**

- Acquire proficiency in using different mathematical tools (matrices, calculus and mathematics of finance) in solving real life business and economic problems.
- Develop an understanding of the various averages and measures of dispersion to describe statistical data.
- Understand the relationship between two variables through correlation and regression.
- Understand the construction and application of index numbers to real life situations.
- Understand the trends and tendencies over a period of time through time series analysis.

### SEMESTER – III

# Auditing and Corporate Governance

After completing the course, the student shall be able to:

- Differentiate between different aspects of auditing especially for internal check, internal control and for overall corporate governance.
- Understand the concept of corporate governance in organisations and its essence for management.
- Provide and assimilate information leading to failure of organisation and corporate scams
- Comprehend the governance framework for an organisation provided by different regulatory bodies in India and Abroad.
- Recognise the essence of ethics in business.

# Company Law

After completing the course, the student shall be able to:

- Understand the rules and the broader procedural aspects involved in different types of companies covering the Companies Act 2013.
- Comprehend and appropriately use the basic legal documents essential for operations and management of company.
- Distinguish between varied company processes, meetings and decisions.
- Know the framework of dividend distribution and role of auditors in a company.
- Understand and evaluate working of depositories and their functions for working in stock market.

# Computer Applications in Business

After completing the course, the student shall be able to:

- Handle document creation for communication.
- Acquire skills to create and make good presentations.
- Make various computations in the area of accounting and finance and present business data using appropriate charts.
- Process and analyze the business data and generalize the work sheets for better understanding of the business environment and decision making.
- Understand and apply the various database concepts and tools in the related business areas.

### Advertising (Skill Enhancement Course)

- Understand the communication objectives behind advertising and promotions.
- Understand the various message and media elements in the advertising decisions.

• Analyse the effectiveness of advertising.

#### SEMESTER – IV

# Corporate Accounting

After completing the course, the student shall be able to:

- Develop an understanding of accounting for share capital and debentures.
- Prepare financial statements of a company.
- Develop understanding of cash flow statements.
- Understand the accounting for amalgamation of companies.
- Prepare consolidated balance sheet for Holding company.

### Cost Accounting

After completing the course, the student shall be able to:

- Understand conceptual framework of Cost Accounting.
- Understand in detail the accounting and control of material and labour cost.
- Understand classification, allocation, apportionment and absorption of overheads in cost determination.
- Calculate the cost of products, jobs, contracts, processes and services.
- Have basic understanding of cost accounting book keeping systems and reconciliation of cost and financial account profits.

# E-Commerce (Skill Enhancement Course)

After completing the course, the student shall be able to:

- Understand conceptual framework of Cost Accounting.
- Understand in detail the accounting and control of material and labour cost.
- Understand classification, allocation, apportionment and absorption of overheads in cost determination.
- Calculate the cost of products, jobs, contracts, processes and services.
- Have basic understanding of cost accounting book keeping systems and reconciliation of cost and financial account profits.

## Investing in Stock Markets (Skill Enhancement Course)

After completing the course, the student shall be able to:

- Understand the basics of Investing, the Investment Environment as well as Risk & Return.
- Learn Indian securities market including the Derivatives Market.
- Learn EIC framework and conduct Fundamental Analysis.
- Understand Technical Analysis.
- Understand the Mutual funds market and learn to Invest in Mutual Funds.

### SEMESTER - V

## Fundamentals of Financial Management

After completing the course, the student shall be able to:

• Explain the nature, scope and objective of financial management, along with Time Value of Money, Risk & Return.

- Analyze Capital Budgeting Process and Techniques including NPV, IRR and Profitability Index.
- Examine various Capital structure theories and estimating cost of capital.
- Critically examine basic Theories and policies of Dividend.
- Estimate working capital along with an overview of cash receivables and inventory management.

### Goods and Service Tax

After completing the course, the student shall be able to:

- Connect with the genesis of goods and services tax (GST), decipher the constitutional amendment carried out to install GST in India and comprehend the composition and working of GST council.
- Understand the meaning of supply under GST law, differentiate between intra-state and inter-state supply, comprehend rules related to the place of supply and compute the value of supply.
- Comprehend the utilization of input tax credit, and the reverse charge mechanism of paying GST and to know the procedure for claiming refund under GST law.
- Understand the provisions for registration under GST along with special provisions such as those related to anti-profiteering and avoidance of dual control.
- Know the basic concepts of Customs Act and to compute the assessable value for charging customs duty.

## Auditing and Corporate Governance

After completing the course, the student shall be able to:

- Differentiate between different aspects of auditing especially for internal check, internal control and for overall corporate governance.
- Understand the concept of corporate governance in organisations and its essence for management.
- Provide and assimilate information leading to failure of organisation and corporate scams.
- Comprehend the governance framework for an organisation provided by different regulatory bodies in India and Abroad.
- Recognise the essence of ethics in business.

### SEMESTER - VI

# Management Accounting

- Understand thoroughly the conceptual framework of Management Accounting; different forms of accounting—Financial, Cost and Managerial; types of costs for decision making and cost control; cost control and cost reduction.
- Understand the concept of marginal cost and marginal costing; preparation of income statements using absorption and variable costing; learning of cost-volume-profit analysis and break-even analysis using mathematical and graphical approaches; and their application in businesses.
- Understand the concept of relevant cost and make decisions related to different business situations using marginal costing and differential costing techniques.

- Understand preparation of various types of budgets and budgetary control system as a tool of managerial planning and control; Ability to understand standard costing system as a tool of managerial control; calculation of variances in respect of each element of cost and sales; control ratios.
- Have basic understanding of techniques of performance measurement such as Responsibility Accounting, Divisional Performance Measurement and Transfer Pricing.

## **International Business**

After completing the course, the student shall be able to:

- Understand the process of globalization, its impact on the evolution and growth of international business and to appreciate the changing dynamics of the diverse international business environment.
- Analyze the theoretical dimensions of international trade and intervention measures adopted; to appreciate the significance of different forms of regional economic integration and to understand the concept of Balance of payment account and its components.
- Understand the significance of different forms of regional economic integration and to appreciate the role played by various international economic organisations such as the WTO, UNCTAD, IMF and World Bank.
- Familiarize students with the international financial environment, and get them acquainted with the basic features of the foreign exchange market its characteristics and determinants.
- Critically examine the concept and form of foreign direct investment, and to create awareness about emerging issues in international business such as outsourcing and ecological issues.

# Organisational Behaviour

After completing the course, the student shall be able to:

- Understand the development of organisational behavior and its importance in managing people at the workplace.
- Understand human behavior as an individual.
- Appreciate different theories of motivation.
- Critically evaluate leadership styles and strategies.
- Understand the importance of organisational culture and learn to deal with change and stress.

# Personal Selling and Salesmanship (Skill Enhancement Course)

- Understand the communication objectives behind advertising and promotions.
- Understand the various message and media elements in the advertising decisions.
- Analyse the effectiveness of advertising.
- Comprehend the importance and role of personal selling.
- Understand the process of personal selling.

### SEMESTER - I

## **Introductory Microeconomics**

The course introduces the students to the first course in economics from the perspective of individual decision making as consumers and producers. The students learn some basic principles of microeconomics, interactions of supply and demand, and characteristics of perfect and imperfect markets.

# Mathematical Methods for Economics I

The course hones and upgrades the mathematical skills acquired in school and paves the way for the second semester course Mathematical Methods in Economics II. Collectively, the two papers provide the mathematical foundations necessary for further study of a variety of disciplines including economics, statistics, computer science, finance and data analytics. The analytical tools introduced in this course have applications wherever optimisation techniques are used in business decision-making. These tools are necessary for anyone seeking employment as an analyst in the corporate world. The course additionally makes the student more logical in making or refuting arguments.

# Introductory Microeconomics (Generic Elective)

The course introduces the students to the first course in Economics from the perspective of individual decision making as consumers and producers. The students learn some basic principles of microeconomics, interactions of supply and demand and characteristics of perfect and imperfect markets.

### SEMESTER - II

## Mathematical Methods for Economics II

The course provides the mathematical foundations necessary for further study of a variety of disciplines including postgraduate economics, statistics, computer science, finance and data analytics. The analytical tools introduced in this course have applications wherever optimization techniques are used in business decision-making for managers and entrepreneurs alike. These tools are necessary for anyone seeking employment as an analyst in the corporate world.

### **Introductory Macroeconomics**

This course aims to develop the broad conceptual frameworks which will enable students to understand and comment upon real economic issues like inflation, money supply, GDP and their interlinkages. It will also allow them to critically evaluate various macroeconomic policies in terms of a coherent logical structure

## Introductory Macroeconomics (Generic Elective)

This course will allow students to understand the basic functioning of the macro economy.

### SEMESTER - III

### Intermediate Microeconomics I

The course trains the students of Economics about the basic elements of consumer theory and production theory and the functioning of perfectly competitive market. This course aims to give students a solid grasp of microeconomic analysis at the intermediate-level using mathematical techniques where appropriate.

### Intermediate Macroeconomics I

This course enables students to analyse the macroeconomic performance of various countries using formal analytical tools. It also allows them to evaluate important macroeconomic policies and their implications.

## Statistical Methods for Economics

At the end of the course, the student should understand the concept of random variables and be familiar with some commonly used discrete and continuous distributions of random variables. They will be able to estimate population parameters based on random samples and test hypotheses about these parameters. An important learning outcome of the course will be the capacity to analyse statistics in everyday life to distinguish systematic differences among populations from those that result from random sampling.

# Data Analysis (Generic Elective)

The course will use data simulations and publicly available data sources to help students learn about data types, their organization and visual representation. They will learn how to compute summary statistics and do some basic statistical inference.

# Money and Banking (Generic Elective)

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy.

## Indian Economy I (Generic Elective)

This course will help students understand the key issues related to the Indian economy. It will broaden their horizons and enable them to analyze current economic policy thus improving their chances of getting employed, and be more effective, in positions of responsibility and decision making. The course also serves as the base for further study of sector specific policy discussion that is pursed in the course in the next semester.

### Economic History of India (Generic Elective)

The course exposes the students to understanding the intricacies of India's economic, political and social developments both in the past and present times. It develops analytical

skills, and will be useful in a variety of careers in academics, research, journalism, private sector and government.

## Financial Economics (Skill Enhancement Course)

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.

### SEMESTER - IV

### Intermediate Microeconomics II

This course helps the students to understand efficiency of markets and the environment where the standard market mechanism fails to generate the desirable outcomes. The issues of market imperfection and market failures are important building blocks of this course.

## Introductory Econometrics

Students will learn to estimate linear models using ordinary least squares and make inferences about population parameters. They will also understand the biases created through mis-specified models, such as those that occur when variables are omitted.

### Public Finance (Generic Elective)

The module aims to introduce students to the main concepts in public finance, equip students with a thorough analytical grasp of government taxes: direct and indirect taxes, and familiarise students with the main issues in government expenditure. At the end of the module the students should be able to demonstrate their understanding of the economic concepts of public finances, use diagrammatic analysis to demonstrate and compare the economic welfare effects of various government policy options, and demonstrate their understanding of the usefulness and problems related to government revenues and expenditures.

## Indian Economy II (Generic Elective)

Students will have capability to understand government policies and will enable informed participation in economic decision making, thus improving their employment prospects and career advancement.

### SEMESTER – V

## Indian Economy I

At the end of the course, a student should be able to understand the development paradigm adopted in India since independence and evaluate its impact on economic as well as social indicators of progress and well being.

# Development Economics I

This course introduces students to the basics of development economics, with in depth discussions of the concepts of development, growth, poverty, inequality, as well as the underlying political institutions.

# **Applied Econometrics**

Students will learn the theoretical basis for techniques widely used in empirical research and consider their application in a wide range of problems.

## **Public Economics**

The module aims to introduce students to the main theoretical and empirical concepts in public economics, equip students with a thorough analytical grasp of implications of government intervention for allocation, distribution and stabilization, and familiarize students with the main issues in government revenues and expenditure. At the end of the module the students should be able to demonstrate their understanding of the public economics. In some models, the student will be required to deal with simple algebra problems that will help them to better understand these concepts, use diagrammatic analysis to demonstrate and compare the economic welfare effects of various environmental policy options, demonstrate their understanding of the usefulness and problems related to taxation and government expenditure, and demonstrate their critical understanding of public policies.

## International Trade

The module aims to introduce students to the main theoretical and empirical concepts in international trade, equip students with a thorough analytical grasp of trade theory, ranging from Ricardian comparative advantage to modern theories of intra-industry trade, and familiarise students with the main issues in trade policy and with the basic features of the international trading regime. At the end of the course, the students should be able to demonstrate their understanding of the economic concepts of trade theory. In some models, the student will be required to deal with simple algebraic problems that will help them to better understand these concepts, use diagrammatic analysis to demonstrate and compare the economic welfare effects of free trade and protection, demonstrate their understanding of the usefulness and problems related to topics in international trade, and demonstrate their critical understanding of trade policies.

### **SEMESTER VI**

Indian Economy II

At the end of the course, a student should be able to understand the role of economic policies in shaping and improving economic performance in agriculture, manufacturing and services.

## **Development Economics II**

This course teaches the student various aspects of the Indian economy, as well as important themes relating to the environment and sustainable development. It also introduces them to some issues of globalisation.

### **Environmental Economics**

The module aims to introduce students to the main theoretical and empirical concepts in environmental economics, equip students with a thorough analytical grasp of environmental policy theory, ranging from externalities to international environmental agreements, and familiarise students with the main issues in environmental valuation and with the basic features of the environmental policy tools. At the end of the module the students should be able to demonstrate their understanding of the economic concepts of environmental policy. In some models, the student will be required to deal with simple algebra problems that will help them to better understand these concepts, use diagrammatic analysis to demonstrate and compare the economic welfare effects of various environmental policy options, demonstrate their understanding of the usefulness and problems related to environmental valuation, and demonstrate their critical understanding of environmental policies.

# Money and Financial Markets

This allows students to understand current monetary policies and financial market outcomes. It also enables them to critically evaluate policies.

### Political Economy II

This course exposes the students to the realities of the contemporary world economy and teaches them to develop critical analysis in an integrated and broader political economy framework. It thus enables them to form a more informed view of the world we inhabit by analyzing some of the most contemporary trends and developments from different perspectives. It also exposes the students to interdisciplinary skills and written argumentation, and prepares them for a more holistic research framework. The exposure to interdisciplinary thinking further enables the students for pursuing studies in diverse related areas such as development studies, economic sociology, critical geography, gender studies and social work as also for taking up employment in organisations ranging from international development agencies to development NGOs and corporate CSR. It also prepares the students to face the practical world of work, where economics, business, civil society organisations, social institutions and politics often cohabit in a complex interlinked structure, and employees are expected to comprehend and synthesize materials from diverse sources and perspectives.

## **B.A.** (HONS) HISTORY

### **SEMESTER I**

## History of India- I

After completing the course the students will be able to:

- Discuss the landscape and environmental variations in Indian subcontinent and their impact on the making of India's history.
- Describe main features of prehistoric and proto-historic cultures.
- List the sources and evidence for reconstructing the history of Ancient India
- Analyse the way earlier historians interpreted the history of India and while doing so they can write the alternative ways of looking at the past.
- List the main tools made by prehistoric and proto- historic humans in India along with their find spots.
- Interpret the prehistoric art and mortuary practices.
- Discuss the beginning and the significance of food production.
- Analyse the factors responsible for the origins and decline of HarappanCivilization.
- Discuss various aspects of society, economy, polity and religious practices thatare reflected in the Early Vedic and Later Vedic texts.
- Describe the main features of the megalithic cultures of the Central India, Deccan and South India.

# Social Formations and Cultural Patterns of the Ancient World-I

Upon completion of this course the student shall be able to:

- Trace long term changes in the relationship of humans to their landscapes, to resources and to social groups.
- Discuss that human history is the consequence of choices made in ecological and biological contexts, and that these choices are not only forced by external forces like environmental change but are also enabled by changes in technology and systems of cultural cognition.
- Delineate the significance of early food production and the beginning of social complexity.
- Analyse the process of state formation and urbanism in the early Bronze Age Civilizations.
- Correlate the ancient past and its connected histories, the ways in which it is reconstructed, and begin to understand the fundamentals of historical methods and approaches.

## Delhi through the Ages: The Making of its Early Modern History

Upon completion of this course the student shall be able to:

- Analyse different kinds of sources -- archaeological, architectural and a variety of textual materials.
- Use these materials and correlate their sometimes discordant information.
- Analyse processes of urbanization and state formation.

• Describe the difficulties in appropriating narratives of the state with the history of particular localities.

# Science, Technologies and Humans: Contested Histories

After completing this course, students should be able to:

- Critique the prevalent dominant understanding of science and technology.
- Discuss the complex relations between science, technology and society.
- Examine the role of politics associated with scientific and technological developments and its economics in the capitalist economy.
- Examine the character of 'dual use' technologies.
- Define various initiatives taken by government for promotion of science and technology.

#### SEMESTER II

# History of India- II

After completing this course, the students will be able to

- Discuss various kinds of sources that the historians utilize to write the history of early historical and early medieval India.
- Analyse the processes and the stages of development of various types of state systems like monarchy, republican and centralized states as well as the formation of large empires.
- Discuss the ways in which historians have questioned the characterization of the Mauryan state.
- Delineate the changes in the fields of agriculture, technology, trade, urbanization and society and the major points of changes during the entire period.
- Describe the factors responsible for the rise of a good number of heterodox religious systems and adjustments and readjustments by various belief systems.
- Trace the processes of urbanization and de-urbanization & monetization and monetary crisis in early India.
- Analyse critically the changes in the varna/caste systems and changing nature of gender relations and property rights.
- Write and undertake projects related to literature, science, art and architecture.

# Social Formations and Cultural Patterns of the Ancient and Medieval World

Upon completion of this course the student shall be able to:

- Identify the main historical developments in Ancient Greece and Rome.
- Gain an understanding of the restructuring of state and society from tribe-based polities to those based on territorial identity and citizenship.
- Trace the emergence and institutionalisation of social hierarchies and marginalisation of dissent.

- Explain the trends in the medieval economy.
- Analyse the rise of Islam and the move towards state formation in West Asia.
- Understand the role of religion and other cultural practices in community organisation.

### **SEMESTER III**

# History of India- III (c. 750-1200)

Upon completion of this course the student shall be able to:

- Critically assess the major debates among scholars about various changes that took place with the onset of early medieval period in India.
- Explain, in an interconnected manner, the processes of state formation, agrarian expansion, proliferation of caste and urban as well as commercial processes.
- Discuss the major currents of development in the cultural sphere, namely Bhakti movement, Puranic Hinduism, Tantricism, architecture and art as well as the emergence of a number 'regional' languages.

# History of India- IV (c. 1200–1500)

On completion of this course, the students shall be able to:

- Discuss different kinds of sources available for writing histories of various aspects of life during the thirteenth to the fifteenth centuries.
- Critically evaluate the multiple perspectives from which historians have studied the
  politics, cultural developments and economic trends in India during the period of
  study.
- Appreciate the ways in which technological changes, commercial developments and challenges to patriarchy by certain women shaped the times.

### The Making of Contemporary India (1950-1990s)

Upon completion of this course the student shall be able to:

- Explain the processes of state formation, the localization and spread of religious traditions like Islam and Buddhism
- Analyse the impact of the European presence on local society
- Examine the impact of maritime activity of local society and polity and the developments in the economic and architectural history of the region.
- Discern the history of Populist and Progressive movements along with introduction of New Deal in response to the Great Depression.
- Describe the historiographical trends to study history of Southeast Asia

# **Understanding Heritage**

Upon completion of this course the student shall be able to:

- Explain the complex character of heritage.
- Analyse the historical processes which result into the making of heritage.
- Describe the significance of cultural diversity in the creation of heritage.
- Illustrate how heritage can be a medium to generate revenue
- Discern the nuances of heritage and will appreciate its importance.

#### **SEMESTER IV**

# History of India- V (c. 1500-1600)

Upon completion of this course the student shall be able to:

- Critically evaluate major sources available in Persian and vernacular languages for the period under study
- Compare, discuss and examine the varied scholarly perspectives on the issues of the establishment, consolidation and nature of the Mughal state.
- Explain the changes and continuities in agrarian relations, land revenue regimes, Bhakti and Sufi traditions
- Discuss how different means such as visual culture was used to articulate authority by the rulers
- Discern the nuances of the process of state formation in the areas beyond the direct control of the Mughal state.

## History of India- VI (c. 1750-1857)

Upon completion of this course the student shall be able to:

- Outline key developments of the 18th century in the Indian subcontinent.
- Explain the establishment of Company rule and important features of the early colonial regime.
- Explain the peculiarities of evolving colonial institutions and their impact.
- Elucidate the impact of colonial rule on the economy.
- Discuss the social churning on questions of tradition, reform, etc. during first century of British colonial rule.
- Assess the issues of landed elite, and those of struggling peasants, tribals and artisans during the Company Raj.

## Rise of the Modern West- II

Upon completion of this course the student shall be able to:

• Explain major economic, social, political and intellectual developments in Europe during the 17th and 18th centuries.

- Contextualize elements of modernity in these realms.
- Discuss the features of Europe's economy and origins of the Industrial Revolution.
- Analyse the relationship between trade, empire, and slavery and industrial capitalism. Examine the divergence debate.

## Indian Art and Architecture

At the end of the course, the student should be able to:

- Explain how Indian art was perceived and received in the west under colonial rule and its changing perspectives. This will set the template for examining its various manifestations.
- Through specific examples the student will be able to identify the historical context, socioeconomic processes that went in the formation of art and architectural forms.
- Identify the stylistic features of different genres of art.
- Discuss the iconography of art forms.
- Differentiate between high/courtly art, popular art/folk, and tribal art.
- Point out the continuity in patterns and regional variations.
- Elaborate patronage patterns, artist-patron relations and representation of gender.

# Inequality and Difference

After completing this course, students should be able to:

- Critique the prevalent dominant understanding of Caste, Gender, and Tribe.
- Discuss the complex relations between differences and inequalities.
- Examine the inherent politics in the creation of inequalities and differences.
- Outline various initiatives taken by government to prohibit caste-gender atrocities and uplift of deprived sections of society and its limitations.

#### **SEMESTER V**

## History of the USA: Reconstruction to New Age Politics

Upon completion of this course the student shall be able to:

- Explain the reasons for the implementation of 'Reconstruction' and the causes for its limited success.
- Analyse the growth of capitalism in USA especially in terms of big business, Monopolosim, etc.
- Examine the features of Labour Union movements.
- Discern the history of Populist and Progressive movements along with introduction of New Deal in response to the Great Depression.

- Describe the nature of Women's Liberation movement and also explain the 'Pastoralization' of Housework
- Illustrate the significance of Civil Rights Movements and Martin Luther King Jr.

# History of Modern China (1840-1960)

Upon completion of this course the student shall be able to:

- Develop an in-depth understanding of China's engagement with the challenges posed by imperialism, and the trajectories of transition from feudalism to a bourgeois/ capitalist modernity.
- To locate these historical transitions in light of other contemporaneous trajectories into a global modernity, especially that of Japan.
- Analyse significant historiographical shifts in Chinese history, especially with reference to the discourses of nationalism, imperialism, and communism.
- Investigate the political, economic, social and cultural disruptions caused by the breakdown of the centuries old Chinese institutions and ideas, and the recasting of tradition to meet modernist challenges.
- Comprehend the genesis and unique trajectories of the Chinese Communist Revolution.
- Locate the rise of China and Japan in the spheres of Asian and world politics respectively.

# History of India- VII (c. 1600-1750)

On completion of this course, the students shall be able to::

- Critically evaluate the gamut of contemporaneous literature available in Persian and non-Persian languages for the period under study
- Describe the major social, economic, political and cultural developments of the times
- Explain the intellectual ferment of the seventeenth and eighteenth centuries and its relation to state policies.
- Discern the larger motives behind the Imperial patronage of art and architecture
- Appreciate and express the continued expansion and dynamism of agriculture, crafts and maritime trade in India

## **SEMESTER VI**

# History of India-VIII (c. 1857-1950)

After successful completion of the course, the students will be able to:

• Identify how different regional, religious, linguistic and gender identities developed in the late 19th and early 20th centuries.

- Outline the social and economic facets of colonial India and their influence on the national movement.
- Explain the various trends of anti-colonial struggles in colonial India.
- Analyse the complex developments leading to communal violence and Partition.
- Discuss the negotiations for independence, the key debates on the Constitution and need for socio-economic restructuring soon after independence

# History of Modern Europe- II

Upon completion of this course the student shall be able to:

- Trace varieties of nationalists and the processes by which new nation-states were carved out.
- Discuss the peculiarities of the disintegration of large empires and remaking of Europe's map.
- Deliberate on the meaning of imperialism and the manifestations of imperialist rivalry and expansion in the 19th and early 20th century.
- Analyse the conflict between radical and conservative forces, and the gradual consolidation of ultra-nationalist and authoritarian regimes in Europe.
- Contextualise major currents in the intellectual sphere and arts.

## History of the USA: Reconstruction to New Age Politics

Upon completion of this course the student shall be able to:

- Explain the reasons for the implementation of 'Reconstruction' and the causes for its limited success.
- Analyse the growth of capitalism in USA especially in terms of big business, Monopolosim, etc.
- Examine the features of Labour Union movements.
- Discern the history of Populist and Progressive movements along with introduction of NewDeal in response to the Great Depression.
- Describe the nature of Women's Liberation movement and also explain the 'Pastoralization' of Housework
- Illustrate the significance of Civil Rights Movements and Martin Luther King Jr.

# HISTORY OF MODERN JAPAN (c. 1868-1950s)

Upon completion of this course the student shall be able to:

- Explain Japan's attempts to create new institutional structures and recast traditions to encounter challenges of the west.
- Analyse historiographical shifts in Japanese history in the context of global politics.
- Examine the divergent pathways to modernity followed by Japan.

- Examine distinct perspectives on imperialism and nationalism in East Asia, and understand how historiographical approaches are shaped by their contexts.
- Conceptualise how these distinct histories can be rooted in common cultural traditions.
- Locate and contextualise the history of Japan in world politics.
- Critically discuss contemporary international studies with much greater clarity based on the knowledge of history and culture of Japan.

# Gender in Indian History up to 1500

On completion of this course students shall be able to

- Explain critical concepts such as gender and patriarchy and demonstrate their use as tools for historical analysis
- Examine the role and functioning of power equations within social contexts in Indian history during the ancient period, in the construction of gender identities
- Critically examine representations of gender in literature, focusing on ideas of love, manliness and religiosity
- Examine the role of social and political patronage of art and literature in perpetuating gendered inequalities

# **B.A. (HONS) MATHEMATICS**

## **SEMESTER I**

### Calculus

This course will enable the students to:

- Learn first and second derivative tests for relative extrema and apply the knowledge in problems in business, economics and life sciences.
- Sketch curves in a plane using its mathematical properties in the different coordinate systems of reference.
- Compute area of surfaces of revolution and the volume of solids by integrating over cross-sectional areas.
- Understand the calculus of vector functions and its use to develop the basic principles of planetary motion.

## Algebra

This course will enable the students to:

- Employ De Moivre's theorem in a number of applications to solve numerical problems.
- Learn about equivalent classes and cardinality of a set.
- Use modular arithmetic and basic properties of congruences.

- Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix.
- Find eigen values and corresponding eigenvectors for a square matrix.

# Calculus (Generic Elective)

This course will enable the students to:

- Sketch the curves in Cartesian and polar coordinates as well as learn techniques of sketching the conics.
- Visualize three dimensional figures and calculate their volumes and surface areas.
- Understand limits, continuity and derivatives of functions of several variable and vector-valued functions.

## **SEMESTER II**

# Real Analysis

This course will enable the students to:

- Understand many properties of the real line  $\mathbb{R}$ , including completeness and Archimedean properties.
- Learn to define sequences in terms of functions from  $\mathbb{N}$  to a subset of  $\mathbb{R}$ .
- Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence.
- Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.

## **Differential Equations**

The course will enable the students to:

- Learn basics of differential equations and mathematical modeling.
- Formulate differential equations for various mathematical models.
- Solve first order non-linear differential equations and linear differential equations of higher order using various techniques.
- Apply these techniques to solve and analyze various mathematical models.

# Elements of Analysis (Generic Elective)

This course will enable the students to:

- Understand the real numbers and their basic properties.
- Be familiar with convergent and Cauchy sequences.
- Test the convergence and divergence of infinite series of real numbers.
- Learn about power series expansion of some elementary functions.

### **SEMESTER III**

# Theory of Real Functions

This course will enable the students to:

- Have a rigorous understanding of the concept of limit of a function.
- Learn about continuity and uniform continuity of functions defined on intervals.
- Understand geometrical properties of continuous functions on closed and bounded intervals.
- Learn extensively about the concept of differentiability using limits, leading to a better understanding for applications.
- Know about applications of mean value theorems and Taylor's theorem.

# Group Theory-I

The course will enable the students to:

- Recognize the mathematical objects that are groups, and classify them as abelian, cyclic and permutation groups, etc.
- Link the fundamental concepts of groups and symmetrical figures.
- Analyze the subgroups of cyclic groups and classify subgroups of cyclic groups.
- Explain the significance of the notion of cosets, normal subgroups and factor groups.
- Learn about Lagrange's theorem and Fermat's Little theorem.
- Know about group homomorphisms and group isomorphisms.

### Multivariate Calculus

To understand the extension of the studies of single variable differential and integral calculus to functions of two or more independent variables. Also, the emphasis will be on the use of Computer Algebra Systems by which these concepts may be analyzed and visualized to have a better understanding. This course will facilitate to become aware of applications of multivariable calculus tools in physics, economics, optimization, and understanding the architecture of curves and surfaces in plane and space etc.

## LaTeX and HTML (Skill Enhancement Course)

After studying this course the student will be able to:

- Create and typeset a LaTeX document.
- Typeset a mathematical document using LaTex.
- Learn about pictures and graphics in LaTex.
- Create beamer presentations.
- Create web page using HTML

# Differential Equations (Generic Elective)

The student will be able to:

- Solve the exact, linear and Bernoulli equations and find orthogonal trajectories.
- Apply the method of variation of parameters to solve linear differential equations.
- Formulate and solve various types of first and second order partial differential equations.

### **SEMESTER IV**

# Partial Differential Equations

The course will enable the students to:

- Formulate, classify and transform first order PDEs into canonical form.
- Learn about method of characteristics and separation of variables to solve first order PDE's.
- Classify and solve second order linear PDEs.
- Learn about Cauchy problem for second order PDE and homogeneous and nonhomogeneous wave equations.
- Apply the method of separation of variables for solving many well-known second order PDEs.

## Riemann Integration & Series of Functions

The course will enable the students to:

- Learn about some of the classes and properties of Riemann integrable functions, and the applications of the Fundamental theorems of integration.
- Know about improper integrals including, beta and gamma functions.
- Learn about Cauchy criterion for uniform convergence and Weierstrass M-test for uniform convergence.
- Know about the constraints for the inter-changeability of differentiability and integrability with infinite sum.
- Approximate transcendental functions in terms of power series as well as, differentiation and integration of power series.

### Ring Theory & Linear Algebra-I

The course will enable the students to:

- Learn about the fundamental concept of rings, integral domains and fields.
- Know about ring homomorphisms and isomorphisms theorems of rings.
- Learn about the concept of linear independence of vectors over a field, and the dimension of a vector space.
- Basic concepts of linear transformations, dimension theorem, matrix representation of a linear transformation, and the change of coordinate matrix.

# Computer Algebra Systems and Related Software (Skill Enhancement Course)

This course will enable the students to:

• Use of computer algebra systems (Mathematica/MATLAB/Maxima/Maple etc.) as a calculator, for plotting functions and animations

- Use of CAS for various applications of matrices such as solving system of equations and finding eigenvalues and eigenvectors.
- Understand the use of the statistical software R as calculator and learn to read and get data into R.
- Learn the use of R in summary calculation, pictorial representation of data and exploring relationship between data.
- Analyze, test, and interpret technical arguments on the basis of geometry.

#### SEMESTER V

# **Metric Spaces**

The course will enable the students to:

- Learn various natural and abstract formulations of distance on the sets of usual or unusual entities. Become aware one such formulations leading to metric spaces.
- Analyse how a theory advances from a particular frame to a general frame.
- Appreciate the mathematical understanding of various geometrical concepts, viz. balls or connected sets etc. in an abstract setting.
- Know about Banach fixed point theorem, whose far-reaching consequences have resulted into an independent branch of study in analysis, known as fixed point theory.
- Learn about the two important topological properties, namely connectedness and compactness of metric spaces.

# Group Theory-II

The course shall enable students to:

- Learn about automorphisms for constructing new groups from the given group.
- Learn about the fact that external direct product applies to data security and electric circuits.
- Understand fundamental theorem of finite abelian groups.
- Be familiar with group actions and conjugacy in
- Understand Sylow theorems and their applications in checking non simplicity.

## Mathematical Modeling and Graph Theory

The course will enable the students to:

- Know about power series solution of a differential equation and learn about Legendre's and Bessel's equations.
- Use of Laplace transform and inverse transform for solving initial value problems.
- Learn about various models such as Monte Carlo simulation models, queuing models, and linear programming models.
- Understand the basics of graph theory and learn about social networks, Eulerian and Hamiltonian graphs, diagram tracing puzzles and knight's tour problem.

#### Numerical Methods

The course will enable the students to:

- Learn some numerical methods to find the zeroes of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision.
- Know about methods to solve system of linear equations, such as Gauss–Jacobi, Gauss–Seidel and SOR methods.
- Interpolation techniques to compute the values for a tabulated function at points not in the table.
- Applications of numerical differentiation and integration to convert differential equations into difference equations for numerical solutions.

#### Discrete Mathematics

After the course, the student will be able to:

- Understand the notion of ordered sets and maps between ordered sets.
- Learn about lattices, modular and distributive lattices, sublattices and homomorphisms between lattices.
- Become familiar with Boolean algebra, Boolean homomorphism, Karnaugh diagrams, switching circuits and their applications.
- Learn about basics of graph theory, including Eulerian graphs, Hamiltonian graphs.
- Learn about the applications of graph theory in the study of shortest path algorithms.

## Mathematical Finance

On completion of this course, the student will be able to:

- Know the basics of financial markets and derivatives including options and futures.
- Learn about pricing and hedging of options, as well as interest rate swaps.
- Learn about no-arbitrage pricing concept and types of options.
- Learn stochastic analysis (Ito formula, Ito integration) and the Black-Scholes model.
- Understand the concepts of trading strategies and valuation of currency swaps.

#### SEMESTER VI

### Complex Analysis

The completion of the course will enable the students to:

- Learn the significance of differentiability of complex functions leading to the understanding of Cauchy–Riemann equations.
- Learn some elementary functions and valuate the contour integrals.
- Understand the role of Cauchy–Goursat theorem and the Cauchy integral formula.
- Expand some simple functions as their Taylor and Laurent series, classify the nature of singularities, find residues and apply Cauchy Residue theorem to evaluate integrals.

# Ring Theory and Linear Algebra-II

On completion of this course, the student will be able to:

- Appreciate the significance of unique factorization in rings and integral domains.
- Compute the characteristic polynomial, eigenvalues, eigenvectors, and eigenspaces, as
  well as the geometric and the algebraic multiplicities of an eigenvalue and apply the
  basic diagonalization result.
- Compute inner products and determine orthogonality on vector spaces, including Gram—Schmidt orthogonalization to obtain orthonormal basis.
- Find the adjoint, normal, unitary and orthogonal operators

# Number Theory

This course will enable the students to:

- Learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc.
- Know about number theoretic functions and modular arithmetic.
- Solve linear, quadratic and system of linear congruence equations.
- Learn about public key crypto systems, in particular, RSA.

# Linear Programming and Theory of Games

This course will enable the students to:

- Learn about the simplex method used to find optimal solutions of linear optimization problems subject to certain constraints.
- Write the dual of a linear programming problem.
- Solve the transportation and assignment problems.
- Learn about the solution of rectangular games using graphical method and using the solution of a pair of associated prima-dual linear programming problems.

# **Probability Theory and Statistics**

This course will enable the students to:

- Learn about probability density and moment generating functions.
- Know about various univariate distributions such as Bernoulli, Binomial, Poisson, gamma and exponential distributions.
- Learn about distributions to study the joint behavior of two random variables.
- Measure the scale of association between two variables, and to establish a formulation helping to predict one variable in terms of the other, i.e., correlation and linear regression.
- Understand central limit theorem, which helps to understand the remarkable fact that: the empirical frequencies of so many natural populations, exhibit a bell-shaped curve, i.e., a normal distribution.

## **B.A. (HONS) POLITICAL SCIENCE**

### **SEMESTER I**

# **Understanding Political Theory**

Course Learning Outcomes: The learner would understand the various traditions and approaches of political theory and appreciate how they get reflected in organizing social living. Understand multiple frames by which the idea of political community is debated. Understand the significance of theorizing and of applying theory into practice.

# Constitutional Government and Democracy in India

Course Objective The aim of this course is to enable students to gain knowledge about the constitutional design as well as the empirical practice of state structures and institutions. The course is expected to enable students to develop the ability to construct rigorous arguments on Indian politics, based on empirical knowledge and informed by a critical awareness of the scholarly literature on the subject.

## United Nations and Global Conflicts (Generic Elective)

Course Learning Outcomes: It provides a detailed account of the organizational structure and the political processes of the UN, and how it has evolved since 1945, especially in terms of dealing with the major global conflicts. The students will learn about the evolution of United Nations as an international organization. The course will develop an in depth understanding of United Nations role in peace keeping and peace building since the Second World War.

## **SEMESTER II**

## Political Theory-Concepts and Debates

Course Learning Outcomes: This course is divided into two sections. Section A helps the student familiarize with the basic normative concepts of political theory. Section B introduces the students to the important debates in the subject. These debates prompt us to consider that there is no settled way of understanding concepts and inaugurate new modes of political debates.

#### Political Process in India

Course Learning Outcomes: This course maps the working of 'modern' institutions, premised on the existence of an individuated society, in a context marked by communitarian solidarities, and their mutual transformation thereby. It also familiarizes students with the working of the Indian state, paying attention to the contradictory dynamics of modern state power.

## Politics of Globalisation (Generic Elective)

The objective of this generic elective paper is to make students from diverse background understand the process of globalization from a political perspective. This paper will create a

broad understanding of the issues and processes globalization based on critical analysis of the various anchors and dimensions of globalization.

### **SEMESTER III**

## Introduction to Comparative Government and Politics

This is a foundational course in comparative politics. The purpose is to familiarize students with the basic concepts and approaches to the study of comparative politics. More specifically the course will focus on examining politics in a historical framework while engaging with various themes of comparative analysis in developed and developing countries.

## Perspectives on Public Administration

The course provides an introduction to the discipline of public administration. This paper encompasses public administration in its historical context with an emphasis on the various classical and contemporary administrative theories. The course also explores some of the recent trends, including feminism and ecological conservation and how the call for greater democratization is restructuring public administration.

## Your Laws, Your Rights (Ability Enhancement)

This course aims to understand law as a source of rights, as a progressively widening sphere of substantive justice, welfare, and dignity. This relationship between laws and rights will be studied through specific values which have come to be seen as integral for a democratic society viz., equality and non-discrimination, empowerment, redistribution and recognition of traditional rights etc.

## Women, Power and Politics (Generic Elective)

This course opens up the question of women's agency, taking it beyond 'women's empowerment' and focusing on women as radical social agents. It attempts to question the complicity of social structures and relations in gender inequality. This is extended to cover new forms of precarious work and labour under the new economy. Special attention will be paid to feminism as an approach and outlook.

#### SEMESTER IV

## Political Processes and Institutions in Comparative Perspective

In this course students will be trained in the application of comparative methods to the study of politics. The course is comparative in both what we study and how we study. In the process the course aims to introduce undergraduate students to some of the range of issues, literature, and methods that cover comparative political.

### Public Policy and Administration in India

The paper seeks to provide an introduction to the interface between public policy and administration in India. The essence of public policy lies in its effectiveness in translating the governing philosophy into programs and policies and making it a part of the community living. It deals with issues of decentralization, financial management, citizens and administration and social welfare from a non-western perspective.

#### **Global Politics**

This course introduces students to the key debates on the meaning and nature of globalization by addressing its political, economic, social, cultural and technological dimensions. In keeping with the most important debates within the globalization discourse, it imparts an understanding of the working of the world economy, its anchors and resistances offered by global social movements while analyzing the changing nature of relationship between the state and trans-national actors and networks.

# Public Opinion and Survey Research (Generic Elective)

This course will introduce the students to the debates, principles and practices of public opinion polling in the context of democracies, with special reference to India. It will familiarize the students with how to conceptualize and measure public opinion using quantitative methods, with particular attention being paid to developing basic skills pertaining to the collection, analysis and utilization of quantitative data.

### **SEMESTER V**

### Classical Political Philosophy

Course objective: This course goes back to Greek antiquity and familiarizes students with the manner in which the political questions were first posed. Machiavelli comes as an interlude inaugurating modern politics followed by Hobbes and Locke. This is a basic foundation course for students.

#### Indian Political Thought-I

This course introduces the specific elements of Indian Political Thought spanning over two millennia. The course as a whole is meant to provide a sense of the broad streams of Indian thought while encouraging a specific knowledge of individual thinkers and texts. Selected extracts from some original texts are also given to discuss in class.

## India's Foreign Policy in a globalizing world

This course's objective is to teach students the domestic sources and the structural constraints on the genesis, evolution and practice of India's foreign policy. The endeavour is to highlight integral linkages between the 'domestic' and the 'international' aspects of India's foreign policy by stressing on the shifts in its domestic identity and the corresponding changes at the international level. Students will be instructed on India's shifting identity as a postcolonial state to the contemporary dynamics of India attempting to carve its identity as an 'aspiring power'.

# Development Process and Social Movements in Contemporary India

Under the influence of globalization, development processes in India have undergone transformation to produce spaces of advantage and disadvantage and new geographies of power. This course proposes to introduce students to the conditions, contexts and forms of political contestation over development paradigms and their bearing on the retrieval of democratic voice of citizens.

#### **SEMESTER VI**

## Modern Political Philosophy

Philosophy and politics are closely intertwined. We explore this convergence by identifying four main tendencies here. Students will be exposed to the manner in which the questions of politics have been posed in terms that have implications for larger questions of thought and existence.

### Indian Political Thought-II

Based on the study of individual thinkers, the course introduces a wide span of thinkers and themes that defines the modernity of Indian political thought. The objective is to study general themes that have been produced by thinkers from varied social and temporal contexts. Selected extracts from original texts are also given to discuss in the class. The list of additional readings is meant for teachers as well as the more interested students.

## Human Rights in a Comparative Perspective

This course attempts to build an understanding of human rights among students through a study of specific issues in a comparative perspective. The course seeks to anchor all issues in the Indian context, and pulls out another country to form a broader comparative frame. Students will be expected to use a range of resources, including films, biographies, and official documents to study each theme.

### Women, Power and Politics

This course opens up the question of women's agency, taking it beyond 'women's empowerment' and focusing on women as radical social agents. It attempts to question the complicity of social structures and relations in gender inequality. Special attention will be paid to feminism as an approach and outlook.

# **B.A.** (HONS.) IN PSYCHOLOGY

## **SEMESTER I**

# Introduction to Psychology

To introduce students to the basic concepts of the field of psychology with an emphasis on applications of psychology in everyday life.

## Statistical Methods for Psychological Research-I

To familiarize students with the use of statistical methods in psychological research and the techniques of descriptive statistics for quantitative research.

## General Psychology (Generic Elective)

Provide an overview of the basic concepts in psychology to help in better communication and enhance adjustment in life and work.

#### SEMESTER II

## Biopsychology

To explore the biological basis of experience and behaviour. To develop an understanding of the influence of behaviour, cognition, and the environment on bodily system. To develop an appreciation of the neurobiological basis of psychological function and dysfunction.

## Psychology of Individual Differences

To develop an understanding of the concept of individual differences with the goal to promote self-reflection and understanding of self and others.

#### Psychology for Health and Well-being (Generic Elective)

To understand the spectrum of health and illness for better health management, nature and sources of stress; health-enhancing behaviors and classification of human strengths and virtues.

#### SEMESTER III

#### Development of Psychological Thought

This course provides a basic introduction to the development of the discipline both from the Indian as well as western perspective. It reviews the development of psychological thought and introduce the issues and debates in contemporary psychology

#### Psychological Research

To educate students with the process and the methods of quantitative and qualitative psychological research traditions.

## Social Psychology

Develop an understanding of the individual in relation to the social world. Introduce students to the realm of social influence, as to how individuals think, feel and behave in social situations.

# Psychology at Work (Generic Elective)

To understand the meaning and theoretical foundations of I/O Psychology and to develop an understanding of how the various theories and methods of I/O Psychology apply to the real work settings

#### Personal Growth and Development (Ability Enhancement Compulsory Course)

To facilitate the process of self-discovery and the development of emotional, cognitive and interpersonal competencies for personal growth and effectiveness using the experiential learning paradigm.

#### **SEMESTER IV**

# Understanding Psychological Disorders

The paper aims at providing an overview of the concept of abnormality and the symptoms and etiology of various psychological disorders. This will sensitize them to information on psychopathology and dispel myths regarding it.

## Statistical Methods for Psychological Research-II

To educate students with the techniques of inferential statistics and hypothesis testing.

## Applied Social Psychology

To help student understand social problems and gain knowledge about intervention strategies.

# Inter-Group Relations (Generic Elective)

To understand the significance of healthy inter-group relations for the society and learn the strategies of resolving intergroup conflicts.

#### Emotional Intelligence (Ability Enhancement Compulsory Course)

To understand the concept of emotional intelligence and learn ways of developing it. Knowing one's and others' emotions, and techniques to manage emotions.

#### **SEMESTER V**

## Understanding and Dealing with Psychological Disorders

To introduce the etiological understanding and therapeutic interventions for the various psychological disorders. It helps students develop and understanding of how to deal with moderate to severe psychopathology.

## Developmental Psychology

To equip the learner with an understanding of the concept and process of human development across the life span To impart an understanding of the various domains of human development To inculcate sensitivity to socio-cultural context of human development

## Community Psychology

To learn the link between individuals and communities and deal with social issues more effectively with people's participation.

## Psychology of Disability

The objective of the course is to provide students with an overview of the disability from the psychological perspective. Students will understand knowledge about disability as a social, cultural, historical and political phenomenon. What does it mean to be "disabled"? How has this meaning changed over time in India? What factors affect a person's experience of disability? Why should people in psychology learn about these matters?

#### **SEMESTER VI**

## Organizational Behavior

To develop an awareness of the concepts related to organizational behaviour and to help the students develop connectivity between concepts and practices of organizations.

# Counselling Psychology

To develop an understanding of basic concepts, processes, and techniques of Counselling and to acquaint the learner with the challenges of Counselling.

# Human Resource Management

To help students understand the various processes and issues inherent in organizations related to human resources like Human Resource Practices Job analysis; Recruitment and selection; Training; Performance evaluation and Organizational change and development

#### Positive Psychology

To introduce the basic concepts of the growing approach of positive psychology and understand its applications in various domains.

# **B.A. (HONS) SOCIOLOGY**

#### **SEMESTER I**

#### Introduction to Sociology – I

- The students learn to apply the sociological perspective in understanding how society shapes our individual lives.
- It also provides a foundation for the other more detailed and specialized courses in sociology.

- The students also learn about the basics of doing field work and use it for doing field work based projects. They also learn to write project reports.
- The students learn how to read and interpret complex ideas and texts and to present them in a cogent manner.

## Sociology of India I

- The course lays the foundation of viewing images and ideas of India through a sociological lens. It further investigates sociological concepts and institutions in the Indian context.
- Through informed interrogation of images, ideas, concepts and institutions of India, the course contributes to the development of critical and analytical thinking.
- The course, supported by an inter-disciplinary approach, facilitates learning and reflecting about the multiple and contextual socio-cultural registers of Indian society.
- Given the high standard/quality of the syllabus and use of innovative teachinglearning methods, the course prepares students to successfully compete in global academia.

#### Indian Society: Images and Realities (Generic Elective)

- A familiarity with ideas of India in their social and historical context.
- An acquaintance with key institutions and processes of Indian society.
- An ability to understand social institutions with sociological imagination with a critical and comparative spirit.
- A preliminary understanding of sociological discourse on Indian society.
- A capacity to situate contemporary public issues pertaining to Indian society in the context of these enduring institutions, processes and contentions.

#### **SEMESTER II**

# Introduction to Sociology II

- The students are introduced to the relationship between theory and perspectives.
- The students are introduced to sociological theories which they learn in greater detail during the later semesters.
- This paper also provides a foundation for sociological theories that are a part of papers in the subsequent semesters.
- The students learn critical thinking skills. They learn how to read, interpret and critique original works of various thinkers.

# Sociology of India II

• The course adds to the sociological interpretation of Indian history and society. The India-specific themes of the course – discourse/knowledge-making, mobilization,

transformation, ideology, identity and politics, for example – are treated, moreover, by drawing from sociological concepts and theories. The course connects the practical and conceptual in terms of both substance and relevance.

- By focusing on the nuanced character of historical and social ideas and processes, the course sharpens the faculties of critical and analytical thinking and doing.
- The adoption of an inter-disciplinary framework, without losing sight of the sociological, makes the course wider in scope and scale. It broadens viewpoints and encourages students to reflect deeply on the multicultural reality which is the defining feature of India.
- The course, in terms of both high quality syllabus-content and innovative teaching learning techniques, matches global standards. Consequently, it adequately trains students to compete in global academia.

## Family and Intimacy (Generic Elective)

- An ability to examine the institution of family and reality of intimate experiences from a sociological perspective.
- Knowledge of diverse forms of the family within their appropriate historical contexts and comparative appreciation of their features.
- Ability and disposition to constitute quotidian space of family and intimacy as an arena of democracy, gender justice and empowerment.
- Awareness of symbiotic relationship between conceptual, ethnographic and critical literatures in social sciences and demonstrate how they work in close tandem.
- To alert next generation policy makers to take the questions of the intimate sphere of the family with appropriate seriousness and make them integral to public reason and conversation.

#### **SEMESTER III**

# Political Sociology

- An ability to comprehend the embeddedness of political and the social in each other.
- Familiarity with different theoretical and conceptual issues in political sociology and a capacity to use them to grasp political phenomena in a cross-cultural and comparative perspective
- Be able to understand and appreciate the diversity of ways in which politics operates historically and spatially to generate a more expansive notion of the realm of the political.
- Be able to understand the relationship between state and society in shaping politics in India both historically and analytically.
- Be able to generate hypotheses and research questions within the theoretical perspectives and ethnographic contexts in political sociology.

#### Sociology of Religion

- Students will be acquainted with representative texts that symbolize the development of knowledge in the field of Sociology of Religion. They will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.
- Students will be able to make a link between texts and paraphrase their arguments and use these to communicate their ideas in research papers, projects and presentations.
- By encompassing contemporary developments the course enables students to think about linkages between religion and society at various levels.

# Sociology of Gender

- An understanding of concepts such as sex and gender by problematising commonsensical notions of gender.
- Raising key issues of power and subordination within the purview of gender and the need for and solutions resorted to as measures to initiate change through gender-based movements.
- Understanding issues relating to gender both at a national and global level.
- Places gender in juxtaposition with other forms of stratification and identity such as caste, class, family and work.

## Reading, Writing and Reasoning for Sociology (Skill Enhancement Course)

- Reading: (a) At the end of the course, students will be equipped to move from reading rudimentarily to advanced reading of texts extensively (b) Read academic texts and identify the central argument(s) and grasp the content of the texts (c) Read texts to identify the organization of ideas, structure of the arguments, style and tone of the author and author biases (d) Identify general conclusions from specific details in texts.
- Writing: (a) Identify standard elements of writing and different genres of writing from personal essay to academic writing. (b) Be equipped to express in different genres of writing such as summaries, critical reviews and essays, using: (i) Multi-draft approach: pre-writing, outlining, drafting, revising, and editing 112 (ii) Formal academic style (iii) Information from several sources and synthesizing into their own writing (iv) Internationally accepted methods of citation and referencing (c) Be able to treat reading and writing as complementary and synergistic (d) Be able to conceptualize and plan a research paper.
- Reasoning: (a) Students should be able to approach writing as a form of reasoning, with specific organization of ideas, style and perspective (b) Be able to develop critical thinking through reflecting on various texts consciously and not take anything for granted in the analyses of the social world (c) Be able to develop scientific reasoning by reading texts for consistency and logic (d) As multicultural classrooms, students should be able to relate specific experiences with specific groups and generate multi-cultural competence in understanding social issues. By reading texts

from cross-cultural contexts, students will be able to approach a creative synthesis in the classroom and grasp the various ways of sociological reasoning.

## Rethinking Development (Generic Elective)

- Understand different ideas of, and approaches to, development.
- Explain the dynamics between developmental institutions, actors, policies, theories, approaches, and ideas and the implementation, consequences, and experiences of development.
- Critically analyze the key features of developmental processes in postcolonial India.
- Undertake a sociological examination of developmental practices in different locations, moments, and fields, and to interpret different outcomes and experiences of development.

#### **SEMESTER IV**

#### Economic Sociology

- Develops familiarity with different theoretical and conceptual aspects of economic sociology as a specialized branch of knowledge.
- Develops background knowledge about the diverse ways in which economy is interlinked with other aspects of society and culture.
- Acquire capacities to understand and analyse the transformations of economy and its key processes in a historical and comparative perspective.
- Develops abilities to generate research questions and arguments about the intersections of economy and society.

## Sociology of Kinship

- Grasp the historical evolution of kinship theories from a biological deterministic approach to culture of relatedness
- Develop an analytical perspectives on concepts relevant for understanding kinship
- Comprehend the coexistence of multiple perspectives in the study of family, marriage and kinship
- Acknowledge the significance of the emergence of new reproductive technologies on recasting kinship

# Social Stratification

- Students will learn about the socio-historical context of stratification theoretical concerns and problems and contemporary issues related to inequalities s and its forms.
- Inculcate in them a truly inter-disciplinary approach in the study of society especially stratification in all its manifestations.
- Understanding of stratification and theories would sensitize students to its various sociological aspects, providing ample scope for applied learning and application.

• Examining forms of stratification, understanding the relevance of caste, race and ethnic identities in contemporary world

## Techniques of ethnographic filmmaking (Skill Enhancement Course)

- The SEC on techniques of ethnographic filmmaking starts by laying groundwork for orienting students to the techniques and methods of using the method of visuals in sociology. As students engage with the course along with other important programmes as part of their B.A (H) in sociology, they also begin to understand the intersection of classroom-based knowledge and practical realm. At this point, the course aims to prepare them for challenges of doing sociological fieldwork and observing real-world spheres through the mode of filmmaking. It enables them to build on the graduate attributes of disciplinary knowledge, critical thinking, research-related skills, scientific reasoning, reflective thinking and multicultural competence.
- Film screenings, assignments and projects in this course are aimed at broadening the spectrum of engagement through sociology. Through ethnographic filmmaking, students move beyond the textual reading and writing mode. Centered on the means of visual, oral and aural, the programme helps them build on the use of diverse media (and tools) to represent cultures and narratives.
- A key learning outcome of the course is to introduce students to the skills and sensitivity needed to engage with the social world. Through ethnographic fieldwork and filmmaking, as they grasp the knowledge of technical, the meaning making of social remains crucial in the SEC programme. An understanding of diversity of gender, culture, class, caste, sexuality, and religion is fundamentally reflected as they produce films on multiple issues.
- Teamwork: An important aspect of the programme is working in teams/groups for the final filmmaking projects. Through team work and extensive discussions, students encounter and learn the importance of decision-making, ethics, communication skills, and planning. These are core competencies that the SEC orients them about.
- The experience of producing visual anthropological content as part of the SEC helps students gear up for the specific electives and courses they take up in the later semesters, particular the research methods course. The brush with social research skills, techniques of sociological fieldwork and thematic issues of 118 representation helps in enriching their engagement with the theoretical framework in final year of BA (H) Sociology.

#### Gender and Violence (Generic Elective)

- Analyze how the social construction of gender across cultures is fundamental to several experiences of violence.
- Engage with different theoretical perspectives and their critiques in the comprehending- individual, social, cultural, political, or economic experiences of violence.

- Critique the dominant western white feminist theories and articulations of liberation, freedom, emancipation and justice through critically informed ideas and responses from non-western contexts.
- Re-think and re-formulate ideas on various structures of struggles and strategies to counter gendered violence.

#### **SEMESTER V**

## Sociological Thinkers –I

- Understanding the grand foundational themes of sociology.
- Application of theories and concepts from classical sociological theories to develop intellectual openness and curiosity.
- Appreciation of the classical concepts and theories to develop awareness of the limits of current knowledge.

## Sociological Research Methods-I

- Students are introduced to sociological research both from a theoretical and methodological perspective. They understand the importance of research in social science.
- Students develop the ability to evaluate the methodological validity of the claims made by theory.
- The course enables students to evaluate a piece of research and move towards designing a simple research project.
- Identify the difference between quantitative and qualitative methods.
- Students will learn to identify ethical and practical issues in research. They also engage with the ideals of objectivity and reflexivity. CO6: Students learn that research methods are universal and not bound by cultural location.

## **Urban Sociology**

- To appreciate the significance of the city and the process of urbanisation and its consequences across the globe, through cross disciplinary texts and ethnographic studies.
- To understand the urban in the historical as well as modern contexts the idea of urbanism and urban space and the intersections in these of institutions, processes and identities. This is to be achieved by exposing students to critical theoretical debates which help them to gain a deeper understanding of city life and urban environment which can also help them understand their own social environment better.
- To learn about key urban processes such as migration, displacement and urban slums, as well as critical contemporary issues such as resettlement and rehabilitation and also engage in issues of public policy, urban transformation and change. Knowledge of such themes will help students pursue further studies in academic areas such as development and also engage in research on public policy, urban transformation and change.

• To develop critical thinking and a reflective perspective through exposure to multicultural thought; to enhance disciplinary knowledge, research-related skills and develop a problem-solving competence.

# Sociology of Work

- Understanding work in its social aspects such as gendered work and unpaid work, as different from its better known economic dimension.
- Understanding work in its global dimensions, including the mutual relation between work in underdeveloped societies and that in developed ones, thus bringing out the importance of the comparative perspective in the study of work.
- Learning about the complexities, disparities and inequalities in the area of work.
- Learning about the socio-historical context of work, theoretical concerns and problems, and contemporary issues in the area of work and industry.

## **SEMESTER VI**

## Sociological Thinkers –II

- Understanding the characteristics and dynamics of the social world, and how postclassical sociologists attempt to understand the social world.
- Appreciating the relevance and limits of the contemporary theories or theoretical approaches to make sense of social reality.
- Understanding the basic methodological approaches of the thinkers, through some original texts and their role in building sociological knowledge.

#### Research Methods II

- Students are introduced to the concept of conducting research, which is inclusive of formulating research designs, methods and analysis of data. Some knowledge of elementary statistics is also provided to the students to acquaint them with quantification of data.
- The thrust of the course is on empirical reasoning, understanding and analysis of social reality, which is integral to the concepts of quantitative research. Students learn to differentiate between qualitative and quantitative aspects of research in terms of collection and subsequent analysis of data.
- Through the competing theoretical perspectives and methodologies, students are able to understand that social reality is multi-faceted, heterogeneous and dynamic in nature.
- By imparting the knowledge of theory and praxis of research, students are prepared to arrive at a critical understanding of the course. It also equips them with necessary skills for employment in any social research organisation.

#### Visual Culture

- Developing the techniques to understand and appreciate visuals; working with visuals as potential representations of matters of sociological interest.
- Understanding 'visuality'/'visualization' as a technique of asserting power and dominance in society; simultaneously locating the subversive potential of alternative or 'counter-visualities.
- Discovering the strength of 'visuals' in an age dominated by techniques of mass production and dissemination of images.

## Reading Ethnographies

- At the end of the course students should be able to identify the expanse of social scientific knowledge and be proficient with the technique and have the patience to read, understand and critically analyze full-length texts that are often about another, unfamiliar culture.
- The course aims to encourage interdisciplinary thinking between sociology, anthropology directly but also with philosophy and literature, through reading of ethnographies. It also seeks to bring the student to a global standard of familiarity with different types of classics within the combined disciplines of sociology, anthropology and ethnology.
- The Course will enable students to not only come to terms with the making of human knowledge but also identifying limits of enquiry by learning and engaging in critical thinking about the research presented in the ethnographies. They are also expected to be able to work with ethnographic description as a unit of knowledge at par with numbers in quantitative studies.
- Doing this Course will help the student discover the strength of small details and to identify what matters to people. They would also be able to engage with the community and understand the significant role of subjective and objective knowledge systems through the exercises in participant observation

## **B.A.** (Programme)

#### **Commerce Courses for B.A. (Programme)**

#### **SEMESTER I**

# Marketing Management

After completing the course, the student shall be able to:

- Understand the basic concepts and principles of marketing and to develop their conceptual skills to be able to manage marketing operations of a business firm.
- Discuss and make the students understand the complexities involved in various targeting and positioning decisions.
- Take effective decisions for launching new products.

- Understand the implications of different pricing strategies.
- Develop the skills among students to enable them to design the promotion-mix strategies and to make the students aware about the current trends in marketing to enable them to take proactive measures while taking marketing decisions.

# Fundamentals of Business Organisation

After completing the course, the student shall be able to:

- Understand the relationship between business and the environment.
- Analyze the environmental factors affecting business with special reference to SWOT analysis.
- Learn about various forms of business organisations.
- Explore the principles of business management.
- Appreciate the functions of management.

#### **SEMESTER II**

# Fundamentals of Entrepreneurship

After completing the course, the student shall be able to:

- Understand entrepreneurship and its process.
- Gain knowledge on the existing socio-economic support system for promotion of entrepreneurship.
- Link the individual's capability and strength as a guiding force towards entrepreneurial orientation and their commitment to act as an agent of social change through entrepreneurial participation.
- Motivate himself towards entrepreneurial desire leading to selection of entrepreneurship as a career.
- Understand entrepreneurial process for initiating new venture creation.

## **Marketing Communication**

After completing the course, the student shall be able to:

- Explore the fundamental concepts of marketing communication and learn effective communication.
- Develop effective marketing communication simulations.
- Categorize the promotion mix tools to be used for creating public relations, sales promotion and direct marketing.
- Understand the consumer buying behavior which will serve as a guide to develop new and suitable marketing strategies.
- Conversant with the process of integrated marketing communication process and also how to manage cultural diversity through communication.

#### **SEMESTER III**

#### Feasibility Study and Business Plan

After completing the course, the student shall be able to:

- Understand how a business idea is generated by analyzing all the interplaying factors.
- Gain know-how of conducting a feasibility study.
- Explore entrepreneurial opportunities in contemporary business environment.
- Learn the concept and implementation of a business plan.
- Learn the significance of Business Planning

# Cyber Crimes and Laws (Skill Enhancement Course)

After completing the course, the student shall be able to:

- Identify cyber crimes associated in online activities
- Work in the vertical having varied access points, data sources, network and system related issues, especially in online transactions.
- Generate and preserve electronic evidences for personal and professional use.
- Work in virtual space safely
- Understand business process or products not falling under the ambit of cyber crimes

# Advertising

After completing the course, the student shall be able to:

- Acquaint with the concepts, objectives and budgeting methods of advertising used in marketing.
- Create advertising message using various advertising appeals and elements of advertising used by the marketers for promoting their brands in the market
- Identify the major media decisions, media choice and scheduling.
- Discover the role and types of advertising agency.
- Acquaint with the methods of measuring advertising effectiveness and role of ASCI in maintaining the ethical nature of advertising.

## **SEMESTER IV**

# Managerial Aspects of Small Business: Operations, Office, Accounting and Functional After completing the course, the student shall be able to:

- Explore the managerial roles and operations in small businesses.
- Understand theoretical and practical aspect of funds flow statement, cash flow statement and integrated ratio analysis.
- Gain basic awareness of manual and computerized office systems and procedures.
- Understand the applicability of management of cash, receivables and inventory in real life.
- Understand the concept and application of product life cycle and learn about entrepreneurial self-renewal and succession planning and its utility in business operations.

## Personal Selling and Salesmanship

After completing the course, the student shall be able to:

- Understand concepts of personal selling, roles and opportunities for sales persons.
- Know the theories, models and approaches of selling.
- Comprehend the meaning of motivation in the context of personal selling.
- Explain the role of a salesperson in entire personal selling process in order to develop a customer-oriented attitude in selling.
- Discover various sales reports and ethical issue in selling.

## Investing in Stock Markets (Skill Enhancement Course)

After completing the course, the student shall be able to:

- Acquaint with the Investment Fundamentals of Equity shares, IPO/FPO & Bonds
- Understand online trading of stocks, Analysis of the company, the Principles of investing
- Perform Comparative analysis of companies, Stock valuations
- Learn to Invest in Mutual Fund
- Understand Derivatives: Instruments & Markets

#### **SEMESTER V**

## Advertising (Skill Enhancement Course)

After completing the course, the student shall be able to:

- Learn the concepts and techniques of advertising used in marketing
- Understand the major media decisions, media choice and scheduling.
- Comprehend various appeals and models used by the marketers for promoting their brands in the market.
- Measure advertising effectiveness with pre and post testing techniques.
- Know organisational arrangements for advertising in India.

#### Sales Promotion & Public Relations

After completing the course, the student shall be able to:

- Understand the fundamental concepts of sales promotion and public relations.
- Ascertain the tools of sales promotion and public relation in enhancing a companies brand equity and influencing consumer behaviour.
- Develop, evaluate and modify the sales promotion programmes.
- Understand the concept, importance and tools of public relations.
- Identify the ethical and legal aspects of sales promotion and public relation activities of a firm.

## Modern Business Organisation (Generic Elective)

After completing the course, the student shall be able to:

- Understand the concept underlying businesses and objectives thereof
- Realize the relevance of different types of organisational structure
- Analyze different forms of business organisations
- Evaluate the emerging modes of business
- Understand the emerging modes of business

# Management of Small Business Enterprises

After completing the course, the student shall be able to:

- Understand entrepreneurial style of management
- Analyze the significance of having appropriate capital structure mix in the organisation
- Construct an influential marketing plan
- Realize the significance of having right mix of employees in the organisation
- Understand the process of planning for management succession.

#### **SEMESTER VI**

# Social Entrepreneurship

After completing the course, the student shall be able to:

- Have enhanced knowledge horizon in the sphere of social issues having propensity for business opportunities.
- Identify new non-traditional business format that helps in attainment of sustainable business development.
- Understand the efforts of both governmental and non-governmental organisation towards promotion of social entrepreneurs.
- Understand cases of social entrepreneurship so as to have an insight in to the societal roles in the promotion of social entrepreneurship.
- Review the success and failure stories on entrepreneurship

## Digital Marketing

After completing the course, the student shall be able to:

- Understand the concept of digital marketing and its growth in India.
- Identify the dynamics and strategies of digital marketing management.
- Know the components of digital marketing presence.
- Understand the role of social media marketing in interactive marketing.
- Comprehend the ethical issues in digital marketing.

## Collective Bargaining and Negotiation Skills (Skill Enhancement Course)

After completing the course, the student shall be able to:

- Identify issues in collective bargaining, its significance.
- Understand the levels, coverage and agreements of collective bargaining.
- Enable to liaison in negotiations
- Recognise the skills required for efficient negotiations.

• Administer the negotiation agreement and handle grievance management

# **Business Management**

After completing the course, the student shall be able to:

- Understand the evolution of management and its significance
- Comprehend management's four functions: planning, organizing, leading, and controlling
- Understand the role of motivation in business
- Appreciate the changing dynamics of management practice
- Understand the controlling and contemporary issues in management

## **Mathematics Courses for B.A. (Programme)**

#### SEMESTER I

#### Calculus

The students who take this course will be able to:

- Understand continuity and differentiability in terms of limits.
- Describe asymptotic behavior in terms of limits involving infinity.
- Use derivatives to explore the behavior of a given function, locating and classifying its extrema, and graphing the function.
- Understand the importance of mean value theorems.
- Learn about Maclaurin's series expansion of elementary functions.

#### **SEMESTER II**

#### Algebra

The course will enable the students to understand:

- Solving higher order algebraic equations.
- Become aware of De Moivre's theorem and its applications.
- Solving simultaneous linear equations with at most four unknowns.
- Get an overview of abstract algebra by learning about algebraic structures namely, groups, rings and vector spaces.

#### **SEMESTER III**

# Analytic Geometry and Applied Algebra

The course will enable the students to:

- Learn concepts in two-dimensional geometry.
- Identify and sketch conics namely, ellipse, parabola and hyperbola.
- Learn about three-dimensional objects such as spheres, conicoids, straight lines and planes using vectors.
- Understand various applications of algebra in design of experiments, modelling of matching jobs, checking spellings, network reliability and scheduling of meetings.

## **SEMESTER IV**

#### **Statistics**

The course will enable the students to:

- Determine moments and distribution function using moment generating functions.
- Learn about various discrete and continuous probability distributions.
- Know about correlation and regression for two variables, weak law of large numbers and central limit theorem.
- Test validity of hypothesis, using Chi-square, F and t-tests, respectively in sampling distributions.