

GOVT NAVEEN COLEGE BORI
DEPARTMENT OF COMMERCE

M.COM PROGRAM OUTCOME (PO2): is expected to achieve following outcomes

1. To Prepare Post Graduate students to accept the challenges of business world.
2. To develop independent logical thinking and facilitate personality development
3. To provide the students for seeking suitable careers in management and entrepreneurship.
4. To study by student's method of data collection and their interpretations through research project
5. To develop among students communication and analytical skill.

M.COM PROGRAM SPECIFIC OUTCOME PSO2

After Completion of M.Com Program, Students can pursue research in their chosen areas.

1. For teaching in Schools and Colleges after qualifying essential tests.
2. For working as data analyst.
3. To work as investment consultants after a brief internship in suitable organizations absorbed in Banking and Insurance sector as executives.
4. Students can work under Chartered Accountants for their taxation related work.

COURSE OUTCOME

CLASS	SUBJECT	COURSE OUTCOME
M.COM Ist SEMESTER	MANEGERIAL ECONOMICS	<p>To enable the students form a clear idea of Managerial Economics to take decision making.</p> <ol style="list-style-type: none"> 1. To enable the students understand determination of price under different market forms. 2. To enable the students understand the situation of consumer and producer equilibrium. 3. Ability to forecast demand in light of changing circumstances and to formulate business plans. 4. Ability to chalk out Business Policies. 5. Knowledge about Profit Planning and control.

	INCOME TAX LAW & ACCOUNTS	<ol style="list-style-type: none"> 1. To enable the students to identify the difference between Tax Evasion, Tax Planning and Tax Avoidance. 2. Understanding of various deductions, rebates and reliefs to reduce the taxable income and tax liability. 3. Skill to take managerial decisions keeping in view the Income Tax Rules. 4. Knowledge of Double Taxation Avoidance Agreement.
	STATISTICAL ANALYSIS	<ol style="list-style-type: none"> 1. To bring out clearly the importance of statistics in solving different research problems. 2. To enable the students in-depth understanding of the concepts of sampling, correlation and their applicability. 3. To enable the students to learn probability theory and their applications.
	CORPORATE LEGAL FRAMEWORK	<p>Students get knowledge of relevant provisions of various laws influencing business operations</p> <ol style="list-style-type: none"> 1. Students will gain knowledge regarding formation of company, Memorandum of association; Articles of association; Prospectus; Share capital and membership. 2. Students gain knowledge regarding negotiable instruments and their application in business 3. They gain significant knowledge regarding SEBI and its regulation and laws pertaining to financial markets
	ADVANCE ACCOUNTING	<p>Students learn accounting issues and practices such as maintenance of company accounts and handling' accounting adjustments.</p> <ol style="list-style-type: none"> 1. Students acquire knowledge regarding Accounting for issue, Forfeited and redemption of shares and debentures.

		<ol style="list-style-type: none"> 2. Student learn to draft financial statements of companies. 3. Accounting issues relative to amalgamation and reconstruction of companies. 4. Accounting for holding and subsidiary companies. 5. Accounts relating to Liquidation of companies.
M.COM II SEMESTER	TAX PLANNING AND MANAGEMENT	<p>Students get conversed with the concept of corporate tax planning and Indian tax laws, as also their implications for corporate management.</p> <ol style="list-style-type: none"> 1. Students get to know about calculation of taxable Income and tax of Firm and Companies. 2. Return of Income, Provisional Regular, Expert and emergency assessment, Re opening of assessment. 3. Concept of tax Planning ; Tax avoidance and tax evasions ; Tax planning with reference of location, nature and form of organization of new 4. Tax planning to capital structure, decision dividend policy; Inter corporate dividends and bonus shares. 5. Preparation of income tax returns, Computation of Income tax, Tax deduction at source; Advance payment of tax.
	ADVANCE STATISTICS	<p>Students learn the application of statistical tools and techniques for decision making.</p> <ol style="list-style-type: none"> 1. Students learn the concept of Statistical Decision Theory: Decision environment, Expected profit under uncertainty and assigning probabilities and utility theory. 2. Students learn Statistical Estimations, interval estimation of population mean, proportion and variance Statistical Testing - Hypothesis and Errors, Sample size - Large and Small Sampling test Z tests, T Tests & F Tests.

		<ol style="list-style-type: none"> 3. Association of Attributes: Two Attributes, consistency of data, measurement of Association of. 4. Interpolation and Extrapolation - Parabolic Binomial, Newton and long rages method
	BUSINESS LAWS	<p>Students gained knowledge of relevant provisions of various laws influencing business operations</p> <ol style="list-style-type: none"> 1. Students learn about objectives of SEBI, Functions and Role of SEBI 2. Students get to know about MRTP Act 1969: Monopolistic Trade Practice Meaning, essentials, Restrictive Trade Practices 3. Consumer Protection Act 1986: Needs of Act, Rights of consumers, Objectives of Act. 4. FEMA Act 1999: Objectives; Regulation and Management of FEMA, Penalties Appeal. 5. W.T.O.: Brief History of WTO, Objectives and Functions, Organization, W.T.O. and India,
	BUSINESS ECONOMICS	<p>Students develop managerial perspective to economic fundamentals' as aids to decision making under given environmental constraints.</p> <ol style="list-style-type: none"> 1. Students learn about Cost Theory and Estimation, economic value analysis 2. Students learn Price Determination under Different Market Conditions: 3. Students learn Pricing Practices: Methods of price determination in practice, pricing of multiple products; price discrimination; 4. Students learn Business Cycles: Nature and phases of business cycle; Theories of business cycles. 5. Inflation: Definition, Characteristics and types; Inflation in terms of demand- pull and cost-push factors; Effects of inflation.

	SPECIALISED ACCOUNTING	<p>The students gets knowledge to accounting issues and practices such as maintenance of company accounts and handling accounting adjustments.</p> <ol style="list-style-type: none"> 1. Students get acquainted to Accounts of General Insurance Companies. 2. Students learn Accounts of Banking Companies. 3. Accounts of Public Utility concerns: Double Accounts System. 4. Royalty accounts. 5. Investment accounts.
M.COM III SEMESTER	MANAGEMENT CONCEPT	<p>Students understand and conceptual framework of management and organizational behavior</p> <ol style="list-style-type: none"> 1. Students get to know about Schools of Management Thought : Scientific, process, human behavior and social system school 2. Students learn about Managerial Functions : Planning - concept, significance, types; Organizing - concept, principles of authority, theories, types of organizations, authority, responsibility, power, delegation, decentralization; 3. Staffing; Directing; Coordinating; Control - nature, process, and techniques 4. Motivation : Process of motivation; Theories of motivation 5. Group Dynamics and Team Development : Group dynamics - Definition and importance, types of groups
	ORGANIZATIONAL BEHAVIOUR	<p>Student understand and conceptual framework of management and organizational behavior</p> <ol style="list-style-type: none"> 1. Organizational Behavior : concept and significance; Relationship between management and

		<p>organizational behavior.</p> <ol style="list-style-type: none"> 2. Students learn about Leadership : Concept; Leadership styles; Theories 3. Organizational Conflict : Dynamics and management; Sources, patterns, levels, and types of conflict; 4. Interpersonal and Organizational Communication : Concept of two-way communication; Communication process; Barriers to effective communication; 5. Organizational Development : Concept; Need for change
	<p>ADVANCED COST ACCOUNTING</p>	<p>Students acquainted to the basic concepts and the tools used in cost accounting.</p> <ol style="list-style-type: none"> 1. Students learn about Cost Analysis, concepts and classification, Materials control – Techniques of Materials control 2. Students get to know about Labor cost – Computation and control, Overheads – Accounting and Control. 3. Job, Batch, Contract Costing and operating costing 4. Process Costing, Joint products & By – products costing. 5. Budgetary control
	<p>MANAGEMENT ACCOUNTING</p>	<p>Students get acquainted with the accounting concepts, tools and techniques for managerial decisions.</p> <ol style="list-style-type: none"> 1. Students get the knowledge of Management accounting as a area of accounting; 2. Students gained knowledge of responsibility accounting 3. Budgetary control and standard costing analysis
		<p>Students get acquainted with the accounting concepts, tools and techniques for managerial decisions.</p> <ol style="list-style-type: none"> 1. Break-even-analysis; Assumptions and practical

	ACCOUNTING FOR MANEGERIAL DECISIONS	<p>applications of break- even-analysis</p> <ol style="list-style-type: none"> 2. Students learn to Analyze financial Statements: 3. Cash flow analysis and Fund flow analysis. 4. Contemporary Issues in Management Accounting. 5. Reporting to Management
M.COM IV SEMESTER	PRINCIPLE OF MARKETING	<p>Students understanding of the conceptual framework of marketing and its applications in decision making under various environmental constraints.</p> <ol style="list-style-type: none"> 1. Students learn about nature, scope and importance of marketing; Marketing concept and its evolution. 2. Students get to know about Market Analysis and Selection – Marketing environment 3. Product Decisions –; Product line and product mix 4. Pricing decision and distribution channels
	ADVERTISING & SALES MANAGEMENT	<ol style="list-style-type: none"> 1. Students will get to know about Concept, Scope, Objectives and Functions of Advertising. 2. Students learn about Pre-launch Advertising Decision: Determination of target audience 3. Students learn about sales management
	MARKETING RESEARCH	<p>Students get to know about research methodology and its significance in post graduate programs</p> <ol style="list-style-type: none"> 1. Marketing Research decisions and market information systems 2. Specialized areas of application of marketing research. 3. Advertising Research: Planning and Procedure, New Product Research.
	INTERNATIONAL MARKETING	<p>Students learn the significance of entering international markets, Export marketing is a need of an hour</p> <ol style="list-style-type: none"> 1. Students learn to enter Foreign market: Product designing, standardization Vs. Adaptation; Branding, Packaging and Labeling.

		<ol style="list-style-type: none">2. Quality issues and after sales service; International pricing3. Promotion of products and services abroad4. Export policy and practices in India, Trends in India's foreign trade
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GOVT NAVEEN COLEGE BORI
DEPARTMENT OF COMMERCE

B.COM PROGRAM OUTCOME (PO2): is expected to achieve following outcomes

Students will be prepared to work in functional areas such as accounting, tax, banking, insurance and corporate law. Students can start their own business on their own. Students can gain a thorough understanding of finance and commerce. and finance with hands-on exposure helps students get organized. in the field of finance and commerce. Students will acquire knowledge of various disciplines of commerce, business, accounting, economics and finance, auditing and marketing. Aptitude to work effectively and efficiently in a corporate environment.

B.COM PROGRAM SPECIFIC OUTCOME PSO2

1. To develop a thorough understanding of Accounts and financial functions of an organization.
2. To develop quality leadership in financial area.
3. To collate and integrate systems of Accounts and finance.
4. To encourage the students to undertake higher studies and research in commerce and allied disciplines.
5. To communicate and share their ideas with industry effectively and efficiently.
6. To be able to work at individual as well as team level in accounting area.
7. To become proficient in using information technology and accounting tools in decision making process.

COURSE OUTCOME

CLASS	SUBJECT	OUTCOME
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<p>B.COM PART I</p>	<p>FINANCIAL ACCOUNTING</p>	<ol style="list-style-type: none"> 1. To learn principles and concepts of accountancy. 2. To Understand the basic concepts and conventions of accounting. 3. To explain the application of accounts in sole trader, chances of errors and rectification. 4. To Write up the accounting for partnership firm , admission and dissolution of partnership firm 5. To Write up the Receipts and Payments, Income and Expenditure Account and Balances Sheet. 6. To understand the concept of Branch account.
	<p>BUSINESS MATHEMATICS</p>	<ol style="list-style-type: none"> 1. To enable the students to learn mathematics for Business. 2. To make them understand the concept of Profit & loss, Simple Interest and Compound Interest for business. 3. To understand the application of Average, Ratio and Proportion and Percentage. 4. To describe matrix concept and linear equations in two variables. 5. To understand the logarithm and its laws of addition, subtraction, multiplication and division.
	<p>BUSINESS ENVIRONMENT</p>	<ol style="list-style-type: none"> 1. Students get an insight into meaning of business environment and its components 2. To familiarize the students by the concept of Savings, Investment and Expenditure. 3. To gave an insight to the New Industrial Policy . 4. To familiarize with Economic System & its types. 5. To enable the students to analyze Positive and Negative impact of Liberalization, Privatization and Globalization in Indian economy. 6. To describe implication of Deficit Financing,

		Disinvestment of Public enterprises and Demonetization etc. in Indian Economy.
	ENVIRONMENTAL SCIENCE	<ol style="list-style-type: none"> 1. Students learn the Concept of Sustainability and its development 2. Significance of Ecosystems, Case Studies on Ecosystems, Natural resources are covered. 3. Biodiversity levels, Threats to biodiversity, Ecosystem and bio diversity services are covered. 4. Environmental Pollution, Environmental Policies & Practices, Case Studies on pollution are covered. 5. Environmental Movements, Ethics, Communication and Public awareness are being taught with corresponding filed work.
	BUSINESS ECONOMICS	<ol style="list-style-type: none"> 1. Students learn and understand the economic theory. 2. Students know the significance the demand analysis and Elasticity of demand. 3. They have clear knowledge on production functions. 4. To Elucidate the Pricing Methods and Policies. 5. To understand the various price theories.
	BUSINESS REGULATORY FRAMEWORK	<ol style="list-style-type: none"> 1. Students understand the essential elements of valid contract. 2. Students learn the law relating to Minor, Unsound Mind and persons disqualified by law. 3. Students understand the modes of performance and discharge. 4. Students have clear understanding about contract of indemnity and guarantee. 5. They will learn the significance of explain the sale of goods act and consumer protection act.
		<ol style="list-style-type: none"> 1. Students make effective and impressive communication.

	BUSINESS COMMUNICATIONS	<ol style="list-style-type: none"> 2. Students make communication in ethical manner. 3. Capable to make persuasive digital communication. 4. Capable to make abstract & summaries of proposals. 5. Better presentation and communication using proper body language.
B.COM PART II	CORPORATE ACCOUNTING	<ol style="list-style-type: none"> 1. Students Understand regarding issues of shares, types of share capital, forfeiture, reissue and pro rate allotment of shares 2. To make them understand the redemption of preference shares 3. Students understand debentures and redemption of debenture process 4. They I learn the final accounts of companies. 5. To illustrate the valuation of goodwill and shares. 6. To explain the concept of Holding Companies 7. They learn about the Amalgamation, Absorption, Internal & External Reconstruction. 8. To make out the Liquidation of Companies.
	BUSINESS STATISTICS	<ol style="list-style-type: none"> 1. To make students learn the statistical methods and their applications in commerce. 2. Students learn the concept of statistics, primary and secondary data, diagrammatic, graphical Presentation. 3. To describe measures of dispersion, deviation and skewers. 4. To make them understand the concept of correlation, co-efficient of correlation. 5. To define time series, methods of estimating strand, index numbers. 6. To explain the concept of probability and its implication in business
		<ol style="list-style-type: none"> 1. To make students learn the concept, scope and classification of Cost Accounting.

	COST ACCOUNTING	<ol style="list-style-type: none"> 2. Material, labor and overhead accounting treatment & Methods 3. To learn the System of Wage Payment under Helsey, Rowan and other methods 4. Write up the process costing and different types of losses 5. To understand the operate costing and contract costing.
	PRINCIPLE OF MANAGEMENT	<ol style="list-style-type: none"> 1. Students learn the nature, scope and functions of management. 2. They learn the significance, methods and types of planning. 3. To describe the process, principles and structures of organization. 4. To understand motivation theories in management. 5. To illustrate the communication in management. 6. To make them learn about the various techniques of Controlling
	COMPANY LAW	<ol style="list-style-type: none"> 1. Students learn the various provisions of Companies Act 2013 2. To have clear understanding about the formation of company 3. To disclose the forms, contents and alteration of memorandum and articles of association. 4. To comprehend contents and misstatement in prospective. 5. To know the qualification, appointment, powers and liabilities of director and secretary. 6. To explain the types of meeting and modes of winding up.
		<ol style="list-style-type: none"> 1. To enable the student to know the fundamental of being a good entrepreneur.

	<p style="text-align: center;">ENTREPRENEURSHIP DEVELOPMENT</p>	<ol style="list-style-type: none"> 2. To enable the student to learn the concept of entrepreneurial ship. 3. To enable the student to learn about institutional finance and service to entrepreneur. 4. To know the concept of incentives and subsidies provided to the entrepreneurs by the government. 5. On successful completion of this course the student should be well versed in concept relating to entrepreneur's knowledge in the financial institution, project report, incentives and subsidies.
<p style="text-align: center;">B.COM PART III</p>	<p style="text-align: center;">INCOME TAX</p>	<ol style="list-style-type: none"> 1. To familiarize the students about the Knowledge about the Income Tax Act and Residential status. 2. To extent the knowledge about the Income from salaries and House property. Description about the profit or gain of business, profession and income from other Sources. 3. Capital gain and deductions 4. To know the set off and carry forward of losses. 5. Computation of Tax liability and Assessment of Individuals.
	<p style="text-align: center;">MANAGEMENT ACCOUTING</p>	<ol style="list-style-type: none"> 1. To familiarize the Students about Management Accounting techniques that facilitates managerial decision making. 2. To understand the Management Accounting objective and scope. 3. To illustrate an analysis of liquidity, solvency and profitability ratios. 4. To compute working capital, fund flow and cash flow analysis. To know the Classification of budgets and its computation. 5. To understand the Managerial applications of marginal costing.

	PRINCIPLE OF MARKETING	<ol style="list-style-type: none"> 1. The Subject provide the insight of Modern Marketing and other Marketing Concept. 2. Make know the definition and significance of various marketing strategies such as modern marketing, global marketing, travel marketing etc. 3. To make understand the marketing functions. 4. Demonstrate Consumer behavior and customer relations marketing. 5. Describe the product mix and analysis various pricing objectives and strategies. 6. Significance of channels of distribution.
	INDIRECT TAX WITH GST	<ol style="list-style-type: none"> 1. To impart knowledge on the indirect taxes. 2. To explain the concept of excise duty and its implication in the business 3. To make the students to understand the procedure for VAT and filling of returns. 4. To enable the students to learn the fundamental of customs duty and central sales tax. 5. To make understand the concept of GST and its implication in business 6. On successful completion of this course the student should be well versed in the prevailing act.
	AUDITING	<ol style="list-style-type: none"> 1. To impart knowledge about auditing. 2. To have systematic knowledge about the internal control. 3. To comprehend the verification and valuation of Assets and Liabilities. 4. To clarify about Joint Stock Companies Auditor. 5. To have a detailed note on Investigation. 6. To understand the Audit Report.

	<p style="text-align: center;">INTERNATIONAL MARKETING</p>	<ol style="list-style-type: none">1. Students developed an understanding of major issues related to international marketing2. Students developed skills in researching and analyzing trends in global markets and in modern marketing practice3. Be able to assess an organization's ability to enter and compete in international markets.
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PO4 M.COM

GOVT. NAVEEN COLLEGE BORI

BACHELOR OF ARTS PROGRAM OUTCOME (PO): The Combination of subjects offered by the institution aspires in developing among students the basic understandings of Geography, Sociology and Economics . The Program also aspires to develop sufficient fluency in both English and Hindi along with issues on Environment and Human rights. A Multidisciplinary approach aims in furthering their critical thinking, reasoning, their analytical skills, in order that they may be put to use in real life situations.

The Program outcome envisages developing skills of documentation, research, communication and the building of entrepreneurship and leadership amongst students. So that they become responsible leaders and contribute significantly in bettering the quality of life of the rural society that they are a part of .

COURSE OUTCOMES (CO)

Faculty of Arts

CLASS	SUBJECT	COURSE OUTCOME
BA PART I	ENGLISH	To impart the heritage of India’s composite culture through the prescribed text book ‘English Language and Indian Culture ‘
BA PART II		To acquaint the students about the progress India made in the realm of science in the olden times. The Contribution of outstanding scientists of antiquity and also of modern times taught through prescribed lessons .
BA PART III		To acquaint students with contemporary subjects like the new economic policy , Globalization , Privatization, Communication, Information technology and Gender Equality . <ol style="list-style-type: none"> 1. Writing compositions on Contemporary issues 2. Precis writing 3. Advance Exercise in English Grammar 4. Advance Vocabulary 5. Promoting oral and writing proficiency among students .
BSC PART I		To develop the skills of reading and writing among students , comprehending unseen passages, Summarizing very short paragraphs, and writing formal and informal letters .
BSC PART II		Reinforce grammatical structures through intermediate level exercises for further proficiency in communication in English .
BSC PART III		To acquaint students with contemporary subjects like the new economic policy, Globalization, Privatization, Communication, Information technology and Gender Equality <ol style="list-style-type: none"> 1. Writing compositions on Contemporary issues 2. Precis writing 3. Advance Exercise in English Grammar

		<p>4. Advance Vocabulary</p> <p>5. Promoting oral and writing proficiency among students .</p>
B.COM PART I		To develop proficiency in English grammar and to use the knowledge in communicating correctly in speaking and writing ..
B.COM PART II		Developing writing skills through short compositions, expansion of ideas and report writing Advance vocabulary building
B.COM PART III		<p>To acquaint students with contemporary subjects like the new economic policy, Globalization, Privatization, Communication, Information technology and Gender Equality.</p> <p>6. Writing compositions on Contemporary issues</p> <p>7. Precis writing</p> <p>8. Advance Exercise in English Grammar</p> <p>9. Advance Vocabulary</p> <p>10. Promoting oral and writing proficiency among students .</p>

हिंदी भाषा	पाठ्यक्रम	आउटकम
बी. ए., बी.एससी. बी.कॉम. प्रथम	पल्लवन पत्राचार अनुवाद हिंदी वर्तनी, संबंधी अशुद्धियों मानक हिंदी भाषा अपठित गद्यांश संक्षेपण	व्याख्या शक्ति बढ़ाना भाषा शक्ति से संपन्न कराना अन्य भाषाओं की जानकारी देना वाक पटुता बढ़ाना आशा की शुद्धता की जानकारी देना तर्क बढ़ाना व्यक्तित्व विकास करना आदि
बी. ए., बी.एससी. बी.कॉम. द्वितीय	सत्य और अहिंसा ग्राम सेवा युवकों का समाज में स्थान मातृभूमि हिमालय की व्युत्पत्ति	मानवता और नैतिकता का ज्ञान ग्रामीण जन के प्रति सम्मान बढ़ाना देश के प्रति समर्पण और सेवाभाव बढ़ाना भारत की प्राकृतिक संपदा के विषय में जानकारी देना
बी. ए., बी.एससी. बी.कॉम. अंतिम	भारत माता परशुराम की प्रतीक्षा संस्कृति और राष्ट्रीय एकीकरण प्रौद्योगिकी एवं नगरीकरण	भारत की परतन्त्रमता की जानकारी देना अन्याय के विरुद्ध आवाज उठाने की चाहत पैदा करना अपनी भारतीय संस्कृति की जानकारी देना राष्ट्रीयता की शिक्षा देना आधुनिक तकनीकी के बारे में बताना।

Department of Economics			
Course Outcome			
Course	Outcomes		
B.Sc.	Paper	Name of Paper	
Part I	Paper I	Micro Economics	<ul style="list-style-type: none"> The objective of microeconomic theory is to analyse how individual decision-makers, both consumers and producers, behave in a variety of economic environments.

			<ul style="list-style-type: none"> In order to understand how individual decision-makers behave, microeconomists build models, use data and conduct experiments.
Part I	Paper II	Indian Economics	<ul style="list-style-type: none"> The main objective of this paper is to introduce the student to basic understanding of the Indian economy and measurement of various macro-economic variables.
Part II	Paper I	Macro Economics & International Economics	<ul style="list-style-type: none"> The objective of macroeconomic policies is to maximize the level of national income, providing economic growth to raise the utility and standard of living of participants in the economy. The objective of an international trade course is to understand the effects of international trade on individuals and businesses and the effects of changes in trade policies and other economic conditions.
Part II	Paper II	Money banking & Public finance	<ul style="list-style-type: none"> The topic of money banking develop a basic understanding of the financial system: how it operates and why it plays a central role in the economy. The objectives of public finance are achieved by managing and drafting policies pertaining to key areas such as taxation, management of public revenue and expenditure, raising and servicing public debt, fiscal administration at various levels
Part III	Paper I	Development & Environmental economics	<ul style="list-style-type: none"> The main objective of Development & environmental economics is to maintain a balance between economic development and environmental quality. environmental economists have to explore the various socio-economic possibilities to reduce pollution and uplift the standard of living of the people.
Part III	Paper II	Statistical method	<ul style="list-style-type: none"> Statistical method is the discipline that concerns the collection, organization, analysis, interpretation and ...

An experimental study involves taking measurements of the system under study.

Department of Geography	
Course Outcome	
Course	Outcome
बी. ए. I प्रथम पेपर - "भौतिक भूगोल : भू आकृति विज्ञान के तत्व"	यह प्रथम वर्ष में भौतिक भूगोल पहला पेपर है इसमें पृथ्वी की उत्पत्ति कब हुई कैसे हुई करोड़ों अरब वर्ष पहले घटी घटनाओं का विभिन्न साक्ष्य एवं प्रमाण से हमें जानकारी होती है बहुत ही महत्वपूर्ण जानकारी इस विषय के द्वारा हम प्राप्त करते हैं।
बी. ए. I द्वितीय पेपर- " भूगोल एवं मानव भूगोल का परिचय"	इस पेपर से भूगोल और मानव के संबंध में महत्वपूर्ण जानकारी प्राप्त होती है संपूर्ण विश्व में किस किस वातावरण में कैसे-कैसे समायोजन मानव करता है मानव कभी वातावरण को अपने अनुकूल बनाता है कभी वातावरण के अनुकूल बन जाता है भूगोल के विभिन्न स्वरूपों में कैसे सामंजस्य स्थापित करता है इसका अध्ययन इस विषय में होता है।
बी. ए. I प्रायोगिक भूगोल	इसमें भूमापन समोच्च रेखाएं का क्रॉस सेक्शन, सांख्यिकी, क्षेत्र सर्वेक्षण, मापक का अध्ययन होता है। मापक का हमारे दैनिक जीवन से लेकर विभिन्न कार्यों में आवश्यकता पड़ती है जैसे गृह निर्माण, फर्नीचर, चिकित्सा और अनेक क्षेत्रों में पैमाना या मापक की आवश्यकता होती है। भूगोल में मापक बहुत ही महत्वपूर्ण विधा है।
बी. ए. II प्रथम पेपर - "भौतिक भूगोल :(जलवायु विज्ञान एवं समुद्र विज्ञान)	इस पेपर को दो भागों में आवंटित किया गया है प्रथम जलवायु विज्ञान द्वितीय समुद्र विज्ञान। पृथ्वी पर अलग-अलग क्षेत्रों में तापमान वायुदाब वर्षा और हवाओं की औसत दशा जलवायु विज्ञान के अध्ययन से भिन्न भिन्न क्षेत्रों की विभिन्न नेताओं का ज्ञान विद्यार्थियों की दी जाती है अतः पृथ्वी के किन भागों की जलवायु कैसी है इसकी जानकारी जलवायु विज्ञान के अध्ययन से हम करते हैं।
बी. ए. II द्वितीय पेपर - " प्रादेशिक अध्ययन विशेष संदर्भ में " उत्तरी अमेरिका महाद्वीप	विद्यार्थियों को विश्व के विभिन्न क्षेत्रों से भिन्न रहने के लिए प्रादेशिक भूगोल का अध्ययन किया जाता है बीए भाग 2 में उत्तरी अमेरिका महाद्वीप का, उच्च वचन, जलवायु, मिट्टी वन, संपदा खनिज पदार्थ, उद्योग, परिवहन एवं विशिष्ट प्रदेशों का अध्ययन करवाया जाता है जिसके कारण विद्यार्थियों का ज्ञान अभी वर्धन बहुत ही उम्दा किस्म का होता है।
बी. ए. II प्रायोगिक भूगोल	वितरण मानचित्र, मानचित्र प्रक्षेपण, मौसम मानचित्र एवं सांची की विधियां लैब वर्ग के अंतर्गत अवगत कराया जाता है। जिसका प्रभाव दैनिक कार्य से लेकर सभी वैश्विक स्तर के कार्य में पड़ता है क्षेत्रीय कार्य प्रिजमेटिक कंपास द्वारा सर्वेक्षण का कार्य किया जाता है जिसमें दूरियां एवं नाहर सड़क रेलवे लाइन बिछाने में इस यंत्र का उपयोग किया जाता है
बी. ए. III प्रथम पेपर - "संसाधन और पर्यावरण"	संसाधन एक ऐसा स्रोत है जिसके द्वारा मानव की विभिन्न आवश्यकताओं की पूर्ण तरह या आंशिक होती है पृथ्वी पर उपलब्ध संसाधन जिसमें मानव भी संसाधन है मानव क्रियाशील संसाधन है और समस्त संसाधनों का शिक्षा तकनीकी विज्ञान बुद्धि विवेक विज्ञान से उपभोग करता है प्रकृति ने पृथ्वी में अनेक प्रकार के जैविक अजैविक संसाधन है इस मानव समाज में तकनीकी शिक्षा विज्ञान उन्नत स्तर पर है वहां पर संसाधनों का भरपूर उपयोग हो रहा

	है इस पेपर के द्वारा समस्त संसाधनों की मात्रा का ज्ञान होता है।
बी. ए. III द्वितीय पेपर- " भारत का भूगोल विशेष संदर्भ में छत्तीसगढ़"	बीए अंतिम वर्ष में भारत का भूगोल नामांतरण सामान्य परिचय भूगर्भिक संरचना उच्चावच अप वाहन जलवायु सिंचाई के साधन खनिज संपदा वन संपदा कृषि एवं कृषि प्रदेश उद्योग व्यापार परिवहन इत्यादि का अध्ययन किया जाता है जिसमें अपने देश की प्राकृतिक संरचना से लेकर सांस्कृतिक संरचना अवगत रहे क्योंकि हम छत्तीसगढ़ राज्य के निवासी हैं एवं छत्तीसगढ़ की संपूर्ण भौगोलिक सामाजिक आर्थिक पर्यटन इत्यादि के संबंध में विद्यार्थियों को अवगत कराया जाता है।
बी. ए. III प्रायोगिक भूगोल	बीए अंतिम वर्ष में प्रायोगिक भूगोल में लैब कार्य में स्थलाकृतिक मानचित्र शंकाकार प्रक्षेप विशिष्ट मापनी के संबंध में अध्यापन कराया के आधार पर किया जाता है इसके द्वारा किसी भी क्षेत्र की सूचना से सच में जानकारी संगीत के माध्यम से प्राप्त होती है। समपट सर्वेक्षण से दिशा एवं अनेक तरह निर्माण कार्यो हेतु इस यंत्र का उपयोग छात्रों को बताया जाता है।

Department of Sociology	
Course Outcome	
Course	Outcome
B.A. Part I – Paper I	Understanding society through its components
B.A. Part I – Paper II	To relate the status of society with theories
B.A. Part II – Paper I	Understanding the traditional society
B.A. Part II – Paper II	Know the reason of crime
B.A. Part III – Paper I	One simple society
B.A. Part III – Paper II	Developing the ability of research

Govt. Naveen College Bori, Dist. Durg (C.G.)

Program Outcomes: Faculty- Science

After successful completion of graduation in science faculty a student should be able to:

PO-1. Acquire the theoretical and practical knowledge with facts of subjects in science such as Chemistry, Botany, Zoology, Physics, Mathematics etc.

PO-2. Understand the basic concepts of science and able to correlate them with their daily life.

PO-3. Develop the critical and scientific thinking to deal with a problem to find out some new solutions.

PO-4. Develop skill of handling instruments, performing experiments and logical analysis of the experimental results.

PO-5. Analyse the every situation of day to day life with scientific approach and able to draw objective conclusion for the betterment of society and humanity.

PO-6. Correlate the knowledge of science with other disciplines such as humanities, social science etc. for development of better approach to solve an issue of society.

PO-7. Develop the scientific attitude for innovative research in various field of science.

PO-8. Develop the communication skill to express and convey the ideas and views to others in impressive manner.

PO-9. Develop moral, ethical and social values in life for overall development of personality.

PO-10. Find out environmental friendly approach for sustainable development.

PO-11. Pursue for higher education such as M.Sc. in chemistry, botany, zoology for B.Sc. (Bio) students and M.Sc. in chemistry, physics and maths for B.Sc. (Maths) students.

PO-12. Perform jobs in various fields such as Indian Civil Services (IAS, IFS, IPS, IRS), Indian Army, Indian Navy, Indian Air Force, Multinational companies, Medical representatives in pharmaceutical industries, marketing, banking sectors, government sectors as well as can develop their own industry.

Programme specific outcomes

Course Outcomes – Science

Department of Chemistry	
Course Outcomes	
Course	Outcomes After completion of the course the student should be able to
Part I - Paper I – Inorganic Chemistry	CO – 1. Know the structure of atom and periodicity in

	<p>the properties of elements</p> <p>CO – 2. Know the process of formation of ionic bond and properties of ionic solids</p> <p>CO – 3. Know the theories of covalent bond formation</p> <p>CO – 4. Understand the salient features of s and p block elements</p> <p>CO – 5. Understand the chemistry of noble gases and theoretical principles involved in qualitative analysis</p>
Part I - Paper II – Organic Chemistry	<p>CO – 1. Understand the basic concepts and electronic effects of organic chemistry.</p> <p>CO – 2. Understand the stereochemistry of organic molecules</p> <p>CO – 3. Understand the conformational analysis of alkanes</p> <p>CO – 4. Know the chemistry of alkane, alkene and alkyne</p> <p>CO – 5. Understand the concept of aromaticity and electrophilic substitution reaction in aromatic compounds</p>
Part I - Paper III – Physical Chemistry	<p>CO – 1. Understand the basic mathematical concept used in chemistry</p> <p>CO – 2. Know the kinetic molecular model of gas and understand the behaviour of real gases</p> <p>CO – 3. Know the intermolecular forces and understand colloid and surface chemistry</p> <p>CO – 4. Understand the symmetry, crystal system and crystal defects</p> <p>CO – 5. Understand the rate of reaction, factors affecting it and theories of reaction rate and catalysis.</p>
Part I - Chemistry Practical	<p>CO – 1. Analyse the inorganic mixtures by the Semi-micro qualitative analysis</p> <p>CO – 2. Estimate the strength of unknown solution by titrimetric method</p> <p>CO – 3. Detect the elements (N, S and halogens) and functional groups in organic compounds</p> <p>CO – 4. Measure the composition of a binary liquid mixture by surface tension method</p> <p>CO – 5. Measure the composition of a binary liquid mixture by viscometer</p>
Part II - Paper I – Inorganic Chemistry	<p>CO – 1. Understand the chemistry of transition series</p>

	<p>elements</p> <p>CO – 2. Understand the redox potential data & its application and chemistry of coordination compounds</p> <p>CO – 3. Understand the valence bond theory and crystal field theory</p> <p>CO – 4. Understand the chemistry of lanthanides and actinides</p> <p>CO – 5. Know the theories of acid and bases and physical properties & chemical reactions of non-aqueous solvents</p>
Part II - Paper II – Organic Chemistry	<p>CO – 1. Understand the mechanism of nucleophilic substitution and elimination reactions</p> <p>CO – 2. Understand the preparation, properties and reactivity of alcohol and phenol</p> <p>CO – 3. Know the nomenclature, structure and reactivity of carbonyl group</p> <p>CO – 4. Understand the chemistry of carboxylic acid and its derivatives</p> <p>CO – 5. Know the reactivity, structure and properties of organic compounds of nitrogen</p>
Part II - Paper III – Physical Chemistry	<p>CO – 1. Understand the laws of thermodynamics and know the meaning of various thermodynamic terms</p> <p>CO – 2. Understand the concept of spontaneity, entropy and free energy</p> <p>CO–3. Know chemical & ionic equilibrium and equilibrium constant</p> <p>CO – 4. Understand the phase rule and its application to one, two and three component system</p> <p>CO–5. Understand the characteristics of electromagnetic radiation, laws of photochemistry and quantum yield</p>
Part II - Chemistry Practical	<p>CO – 1. Qualitative semi micro analysis of mixtures containing interfering radicals.</p> <p>CO – 2. Determine the strength of solution by volumetric method</p> <p>CO – 3. Identify given organic compound</p> <p>CO – 4. Determine R_f value and identify organic compound through paper chromatography</p> <p>CO – 5. Determine the enthalpy of chemical reactions</p>
Part III - Paper I – Inorganic Chemistry	<p>CO – 1. Understand the metal-ligand bonding in transition metal complexes</p> <p>CO – 2. Understand the magnetic properties of</p>

	<p>transition metal complexes</p> <p>CO – 3. Know the classification, properties, bonding and applications of organometallic compounds</p> <p>CO – 4. Know the essential and trace elements in biological processes</p> <p>CO – 5. Understand the concept of hard and soft acid and base and inorganic polymers</p>
Part III - Paper II – Organic Chemistry	<p>CO – 1. Understand organometallic compounds, organosulphur compounds and enolates</p> <p>CO – 2. Understand the properties and structure of biomolecules</p> <p>CO – 3. Understand the chemistry of synthetic polymers and dyes</p> <p>CO – 4. Understand the principle and applications of Mass, IR and UV – Visible spectra</p> <p>CO – 5. Understand the principle of NMR spectra</p>
Part III - Paper III – Physical Chemistry	<p>CO – 1. Understand the basic concept of quantum mechanics along with Schrodinger's equation & its applications</p> <p>CO – 2. Know the quantum mechanical approach of molecular orbit theory</p> <p>CO – 3. Understand the principle and applications of Microwave, Infrared and Raman spectra</p> <p>CO – 4. Understand the concept of Electronic spectra and photochemistry</p> <p>CO – 5. Understand the thermodynamics, molecular and magnetic properties of substance</p>
Part III - Chemistry Practical	<p>CO – 1. Synthesis of inorganic complexes</p> <p>CO – 2. Gravimetric estimation of element</p> <p>CO – 3. Synthesis of Organic Compounds</p> <p>CO – 4. Analysis of an organic mixture containing two solid components</p> <p>CO – 5. Determine the strength of acid or base by conductometric titration</p>

Department of ZOOLOGY		
Course Outcomes		
Course		Outcomes
B.Sc	Paper	Name of Paper

Part I	Paper I	Cell biology and invertebrates	<ul style="list-style-type: none"> ➤ Students will understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles ➤ The course will cover <i>Invertebrates</i>, which is the science that <i>studies</i> the animals without backbone. Introduce students to the difference between <i>invertebrates</i> and vertebrates. <i>Study</i> the link between vertebrates and <i>invertebrates</i>.
Part I	Paper II	Vertebrates and Embryology	<ul style="list-style-type: none"> ➤ Vertebrate zoology is the biological discipline that consists of the study of Vertebrate animals, i.e., animals with a backbone, such as fish, amphibians, reptiles, birds and mammals. ➤ To develop youth interest in the science of embryology. To provide learning experiences in incubation, hatching and brooding. To provide learning of a life cycle through the beginning stages.
Part I	Practica 1		<ul style="list-style-type: none"> ➤ understand the structures and purposes of basic components of prokaryotic and eukaryotic cells. ➤ Different species museums provide us with snapshots of biodiversity and organisms' traits through time. ➤ Dissection study help to determine classification and identify of organisms.
Part II	Paper I	Anatomy & Physiology	<ul style="list-style-type: none"> ➤ The purpose of the teaching and learning of discipline "Human Anatomy" is the acquisition by students of scientific knowledge about the structure of the human body to be used as the study of the following disciplines, as well as for use in professional activities. ➤ This Course is to ensure that

			<p>students understand how the body works. ... State the functions of each organ system of the body, explain the mechanisms by which each functions, and relate the functions and the anatomy.</p>
Part II	Paper II	Vertebrates Endocrinology, Reproductive biology, Behaviour, Evolution & Applied Zoology	<ul style="list-style-type: none"> ➤ <i>endocrinology</i> is concerned with the <i>study</i> of hormones and their actions. This field is rooted in the comparative <i>study</i> of hormones in diverse species, which has provided the foundation for the modern fields of evolutionary, environmental, and biomedical <i>endocrinology</i>. ➤ This (Reproductive biology) in turn provides an important foundation to consider sexual differentiation and development, contraception, infertility and current reproductive technologies. ➤ A behavioral objective is a learning outcome stated in measurable terms, which gives direction to the learner's experience and becomes the basis for student evaluation. ... Affective objectives emphasize feeling and emotion, such as interests, values, attitudes, appreciation, and methods of adjustment. ➤ In evolutionary study They can <i>study</i> how two species that used to be the same became separate species. ➤ To motivate the students for self employment in various applied branches of Zoology.
Part II	Practical 1		<ul style="list-style-type: none"> ➤ Practical work can in fact facilitate learning in the classroom. ➤ Using practical activity can help structure a lesson and improve engagement and knowledge retention: "Many students learn

			<p>more easily by actually "doing" activities. Like study of limb girdles & vertebrates of rabbit etc.</p> <ul style="list-style-type: none"> ➤ Usin help in self employment from apiculture,aquaculture,sericulture etc.
Part III	Paper I	Ecology,environmental-biology,toxicology,microbiology ,& Medical zoology	<ul style="list-style-type: none"> ➤ Ecology is the scientific analysis and study of interactions among organisms and their environment. ... Environmental science focuses on the interactions between the physical, chemical, and biological components of the environment, including their effects on all types of organisms. ➤ The goal of toxicology is to contribute to the general knowledge of the harmful actions of chemical substances, to study their mechanisms of action, and to estimate their possible risks to humans on the basis of experimental work on biological test systemthey study the epidemiology, pathogenesis, processing, clinical diagnosis and prevention including vaccine development of the different microorganisms. He/She investigates the virulence factors and <i>microbial</i> physiology, as well as, the physiopathology and immunological responses of the host to the microorganisms.s.
Part III	Paper II	Genetics, cell physiology, biochemistry, Biotechnology &biotechnique	<ul style="list-style-type: none"> ➤ Study of human genetics can answer questions about human nature, can help understand diseases and the development of effective disease treatment, and help us to understand the genetics of human life. ➤ The course biochemistry aims to provide students with a basic understanding of: the molecular architecture of eukaryotic cells

			<p>and organelles,</p> <ul style="list-style-type: none"> ➤ <i>Biotechnology</i> is a broad area of biology, involving the use of living systems and organisms to develop or make products and biotechniques are use for measuring or detect it by various equipment or technology.
Part III	Practica 1		<ul style="list-style-type: none"> ➤ <i>Biochemical</i> Analytical Methods to <i>Detect</i> Microorganisms etc. ➤ Experiment of blood group detection to find out our <i>blood type</i> sitting at home with the help of a <i>Blood Group Test Kit</i>. ➤ ph meter,colorimeter,centrifuge and microscopes are equipment for measure of different types of functions like separation of bio molecules etc.

Department of Botany	
Course Outcomes	
Course	Outcomes After completion of the course the student should be able to
Part – I - Paper –I - Bacteric, virwers, fungi, lichens & Algae.	<ol style="list-style-type: none"> 1. Understand the diversity among algae, fungi, bacteria, and viruses. 2. Understand the economic importance of algas, fungi, bactria and mycoplasma lichenis 3. Understand the role of blue green alga in nitrogen economy of sort and reclamation of usher land 4. Understand the mushroom biotechnology 5. Understand the recombination procers in bacteria.
Part I - Paper –II - Bryophytes pteridophytas Gymnosperms and palacobotany.	<ol style="list-style-type: none"> 1. Understand the morphological diversity of bryophyte pteridophyta and gymnosperm. 2. Know the evolution of Bryophytis pterictophytes and Gymnosperms. 3. Know the scope of pateobotany type of fossils and geological time scals 4. Understand the various fossil genera presenting different fossil growth
Part . – II - Paper –I - Diversity of seed plants and their systematic.	<ol style="list-style-type: none"> 1. Know the conceptual development of taxonomy and systematic

	<ol style="list-style-type: none"> 2. Understand the phylogeny of angio sperms 3. Trace the history of development of systems of classification 4. Learn about the charaters floral formula and floral diagrams of different families 5. Understand various rules, principles and recommendations og plants nomen culture produces pn plant indentification.
Part . – II - Paper –II - Structure development and reproduction in flowering plants.	<ol style="list-style-type: none"> 1. Understand the various plants of the angiospermic plants (root, shoot, teaf flowers) 2. Know the various tissues and their arrangement in monocol and dicot angiospermic plants. 3. Understand the secondary growth in plants 4. Know the method of pollination and fertilization & development types of fruits in anguospermic plants 5. Understand the process of vegetative propagation & seed dispersal method. 6. Understand the process of triple fusion Or double fertilization
Part . – III - Paper –I - Plant physiology, Biochemistry and biotechnology	<ol style="list-style-type: none"> 1. Know the importance and scope of plant physiology biochemistry and biotechnology 2. Learn and understand the mineral netrition absorption of will traslocation of soluties transpiration photosynthersis respirulson & N2 metabolism in plants. 3. Understand the lipical metabolism in plants 4. Understand the fundamentals of recombinant technology 5. Understand the principles and basic protocols for plant tissue cultures. 6. Understand the structure and function of plants harmones 7. Learn about enzymology 8. Understand the process of physiology of flowering.
Part . – III - Paper –II - Ecology and utilization of plants.	<ol style="list-style-type: none"> 1. Understand plant communities and ecological adoptaions in plants 2. Understand the role of plants in human walfare 3. Gain knowledge about various plants of economic users

	<ol style="list-style-type: none"> 4. Understand the properties of community ecology ecosystem 5. Understand the biographical region of india vegalation types grassland and forest type of india 6. Understand biochemical Cycles. 7. Know the process of succession
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Department of Physics	
Course Outcomes	
Course	Outcomes After completion of the course the student should be able to
Part I – Paper I – Mechanics, oscillation and properties of matter	CO – 1. Understand the Cartesian, cylindrical and spherical coordinate system CO – 2. Understand the rigid body motion CO – 3. Understand the Bifilar oscillation CO – 4. Understand the E as an accelerating field CO – 5. Understand the elasticity
Part I – Paper II – Electricity, Magnetism and Electro magnetic theory	CO – 1. Know the Repeated integrals CO – 2. Know the Coulombs law CO – 3. Know the Dielectric constant CO – 4. Know the Magnetisation current CO – 5. Know the Electromagnetic induction
Part I – Practical	CO – 1. Determination of surface tension of liquid CO – 2. Determination of viscosity of fluid CO – 3. Study of decay of current in LR and RC circuit CO – 4. Response curve for LCR circuit CO – 5. Study of magnetic field due to current
Part II – Paper I	CO – 1. Know the laws of thermodynamics CO – 2. Know the Thermodynamic relationships CO – 3. Understand the Maxwellien distribution of speeds in an ideal gas CO – 4. Know the statistical basis of thermodynamics CO – 5. Understand the indistinguishability of particles and its consequences
Part II – Paper II	CO – 1. Know the waves in media CO – 2. Know the Fermat's Principle of extremum path,

	<p>the aplanatic points of a sphere and other applications.</p> <p>CO – 3. Know the interference of light</p> <p>CO – 4. Understand the Fresnel half-period zones & Fraunhofer diffraction</p> <p>CO – 5. Know the Laser system and Application of lasers</p>
Part II – Practical	<p>CO – 1. Study of Brownian motion</p> <p>CO – 2. Determine heating efficiency of electrical kettle with varying voltages.</p> <p>CO – 3. Know the characteristics of a microphone-loudspeaker system.</p> <p>CO – 4. Determine the principal points of a combination of lenses</p> <p>CO – 5. Use of diffraction grating and its resolving limit.</p>
Part III – Paper I - Relativity, Quantum Mechanics, Atomic Molecular And Nuclear Physics.	<p>CO – 1. Know the Reference systems, inertial frames</p> <p>CO – 2. Know the origin of the quantum theory</p> <p>CO – 3. Understand the Quantum Mechanics & its applications</p> <p>CO – 4. Understand the spectra of hydrogen, deuteron and alkali atoms</p> <p>CO – 5. Know the interaction of charged particles and neutrons with mater</p>
Part III – Paper II - Solid State Physics, Solid State Devices and Electronics	<p>CO – 1. Know Amorphous and crystalline solids</p> <p>CO – 2. Know Free electron model of a metal</p> <p>CO – 3. I Know intrinsic semiconductors, carrier concentration in thermal equilibrium</p> <p>CO – 4. Know Half and full wave rectifier</p> <p>CO – 5. Know Introduction to computer organisation, time sharing and multi programming systems</p>
Part III – Practical	<p>CO – 1. Know the characteristics of transistor</p> <p>CO – 2. Characteristics of a tunnel diode</p> <p>CO – 3. Study of voltage regulation system</p> <p>CO – 4. Study of a regulated power supply</p>

Department of Mathematics	
Course Outcomes	
Course	Outcomes
	After completion of the course the student should be able to

Part I – Paper I - Algebra and Trigonometry	<p>CO – 1. Know the Elementary operations on matrices</p> <p>CO – 2. Know the Application of matrices to a system of linear (both homogeneous and nonhomogeneous) equations</p> <p>CO – 3. Know the Mappings, Equivalence relations and partitions</p> <p>CO – 4. Know the Homomorphism and Isomorphism of groups</p> <p>CO – 5. Know the De-Moivre’s theorem and its applications</p>
Part I – Paper II - Calculus	<p>CO – 1. Understand the $\varepsilon - \delta$ definition of the limit of a function</p> <p>CO – 2. Understand the Asymptotes. Curvature</p> <p>CO – 3. Understand the Integration of transcendental functions</p> <p>CO – 4. Understand the Degree and order of a differential equation</p> <p>CO – 5. Understand the Linear differential equations of second order.</p>
Part I – Paper III - Vector Analysis and Geometry	<p>CO – 1. Know the Scalar and vector product of three vectors</p> <p>CO – 2. Know the Vector integration</p> <p>CO – 3. Know the General equation of second degree</p> <p>CO – 4. Know the Sphere. Cone. Cylinder.</p> <p>CO – 5. Know the Central Conicoids. Paraboloids</p>
Part II – Paper I	<p>CO – 1. Know the sequence</p> <p>CO – 2. Know the Continuity & Sequential continuity</p> <p>CO – 3. Know the limit and continuity of functions of two variables</p> <p>CO – 4. Know the Envelopes, Evolutes, Maxima, minima and saddle points of functions</p> <p>CO – 5. Understand the Beta and Gamma functions</p>
Part II – Paper II	<p>CO – 1. Understand the Series solutions of differential equations</p> <p>CO – 2. Know the Laplace Transformation</p> <p>CO – 3. Know the Partial differential equations of the first order</p> <p>CO – 4. Know the Partial differential equations of second and higher orders</p>

	CO – 5. Know the Calculus of Variations
Part II – Paper III	CO – 1. Know the Analytical conditions of Equilibrium CO – 2. Know the Forces in three dimensions CO – 3. Know the Simple harmonic motion CO – 4. Know the Kepler's laws of motion CO – 5. Know the Motion in a resisting medium
Part III – Paper I - Analysis	CO – 1. Know the Series of arbitrary terms. Convergence, divergence and Oscillation CO – 2. Understand Riemann integral CO – 3. Know geometric representation of Complex numbers CO – 4. Know definition and examples of metric spaces CO – 5. Know dense subsets. Baire Category theorem. Separable, second countable and first countable spaces.
Part III – Paper II - Abstract Algebra	CO – 1. Know group-Automorphisms, inner automorphism CO – 2. Know Ring theory-Ring homomorphism CO – 3. Know Definition and examples of vector spaces CO – 4. Know Linear transformations and their representation as matrices CO – 5. Know Inner Product Spaces-Cauchy-Schwarz inequality
Part III – Paper III - Discrete Mathematics	CO – 1. Understand Sets and Propositions CO – 2. Understand Sets and Propositions CO – 3. Understand Finite State Machines CO – 4. Understand Recurrence Relations and Recursive Algorithms CO – 5. Understand Boolean Algebras