

एम० ए० हिन्दी एतृतीय स्तरीय
 चतुर्थ प्रश्नपत्र - भारतीय साहित्य
 शिक्षण योजना (सत्र 2023-24)

क्र	माह	वर्ग	शिक्षण बिन्दु
	जुलाई	(01)	भारतीय साहित्य का स्वरूप, भारतीय साहित्य के अध्ययन की समस्याएँ
	अगस्त		भारतीय साहित्य में आज के भारत का चित्र, हिन्दी साहित्य में भारतीय मूल्यों की अभिव्यक्ति
	सितम्बर	(02)	हिन्दी वर साहित्य का इतिहास - दक्षिणाय भाषा वर्ग में मलयालम पूर्वोक्त भाषा वर्ग में बँगला
	अक्टूबर	(03)	पश्चिमोत्तर भाषा वर्ग में मराठी - हिन्दी भाषा साहित्य - तुलनात्मक अध्ययन उपन्यास - अग्निगर्भ (बंगला - महाश्वेता देवी)
	नवम्बर	(04)	नाटक - दयवदन (लन्दन - गिरीश ठनाड) [समीक्षा, पात्रों का चरित्र - चित्रण, व्याख्या भाग, रचनाकार का परिचय]
	दिसम्बर		कविता संग्रह - कोष्ठी के दृश्य - (मलयालम - के० जी० शंकर पिळ्ळै)
	जनवरी		वस्तुनिष्ठ प्रश्न (अतिलघुउत्तरीय प्रश्न)
	फरवरी		
	मार्च		
	अप्रैल		
	मई		
	जून		

(डॉ० नीला राजिपुर)

बी० काम० / बी-एरग० ली० प्रथम वर्ष (पाठ्ययोजना)
 आधार पाठ्यक्रम
 हिन्दी भाषा - प्रथम पुस्तक
 सत्र - 2023-24

माह	वर्कडाई	पाठ्य विन्दु
जुलाई	① (क) (ख)	पल्लवन, पत्राचार, अनुवाद एक टोकरी भर मिट्टी - माधवशव संप्रे वडे भाई साहब - पेमचन्द
अगस्त	② - (क)	संक्षेपण, हिन्दी में संक्षिप्तकरण, हिन्दी अपठित गद्यांश, पारिभाषिक शब्दावली, हिन्दी में पदनाम, मुलावरे एवं लौकिकीयाँ
सितम्बर	(ख)	जागो फिर एक बार - शूर्यकांत त्रिपाठी निराला जन्मदिन (मिट्टी से कड़ुगा धन्यवाद संग्रह) एकांत श्रीवास्तव
अक्टूबर	③ - (क)	शब्द-शुद्धि, वाक्य शुद्धि, शब्द-ज्ञान-पर्यायवाची शब्द, विलोम शब्द, अनेकाधी शब्द, समस्तुत शब्द, अनेक शब्दों के लिए एक शब्द
नवम्बर	(ख)	भोलाराम का जीव - हरिशंकर परसाई जीप पर खवार इल्लियाँ - शरद जोशी
दिसम्बर	④ - (क) (ख)	मानक भाषा का अर्थ, मानक हिन्दी भाषा का अर्थ, स्वरूप, विशेषताएँ, मानक, उपमानक, अमानक भाषा शिवाजी जी स्वामी विवेकानंद का पत्र राज्य और अहिंसा - महात्मा गाँधी
जनवरी	⑤ - (क)	देवनागरी लिपि, नामकरण, स्वरूप, विशेषताएँ कम्प्यूटर का सामान्य परिचय, कम्प्यूटर में हिन्दी का अनुप्रयोग
फरवरी	(ख)	कृष्ण धरम - धन्धरशर्मा गुलेरी- हृतीरगढ़ का वैभव - हरिलाल शुक्ल
		(डा० नीता शर्मा)

बी० ए० प्रथम वर्ष

हिन्दी साहित्य (प्रथम पुश्तक) (द्वितीय पुश्तक)
अर्वाचीन हिन्दी काव्य / हिन्दी कथा साहित्य
पाठ्य योजना - सत्र - 2023-24

माह	वर्क	शिक्षण बिन्दु
जुलाई	01- I	हिन्दी साहित्य का इतिहास - आदिकाल, भक्तिकाल, रीतिकाल, आधुनिक- काल
अगस्त	II	गबन (उपन्यास) मुंशी प्रेमचंद
सेप्टेम्बर	02- I	कवि परिचय एवं उनकी रचनाएँ - रसूल खलीलदास (प्रारंभिक 50 साखियाँ)
	II	'कफन' (कहानी) मुंशी प्रेमचंद
अक्टूबर	03- I	जायसी - नागमती वियोग वर्णन
	II	आकाशदीप (कहानी) जयशंकर प्रसाद
नवम्बर	04 I	सूरदास - भक्तगीत सार (प्रारंभिक 25 पद)
	II	परदा (कहानी) यशपाल द्वैत (कहानी) कबीरदास
दिसम्बर	05 I	धनानंद - प्रारंभिक 25 छन्द
	II	मलबे का मालिक (कहानी) मोहन राठौष पीछ की दोबत (कहानी) भाष्म झाहनी
जनवरी	I	तुलसीदास (सुन्दरकाण्ड)
	II	जिली हुई रस्सी (कहानी) गुलशेर रवौ शानी गदल (कहानी) रांगेय रायव
फरवरी	I	हुतपाह - विद्यापति, रहीम, रसखान
	II	हुतपाह - उपेन्द्रनाथ अशु, बालशौरि रेड्डी, शिवानी

(डा० नीता रांगेत)

एम० ए० हिन्दी प्रथम सीमेस्टर

प्रथम प्रश्नपत्र - हिन्दी साहित्य का इतिहास
(आदिकाल एवं पूर्वमध्यकाल)

साल - 2023-24 [शिक्षण योजना]

क्र. सं.	बर्ग	शिक्षण विषय
गई	(01)	हिन्दी साहित्य का इतिहास - परंपरा और पद्धति - हिन्दी साहित्य के इतिहास लिखने की परंपरा, साहित्य इतिहास के पुनर्लेखन की समझाएँ
गुला	(01)	काल विभाजन, नामकरण और नामकरण की समझाएँ
गुला	(02)	आदिकाल - आदिकाल की सांस्कृतिक पृष्ठभूमि, रामो काव्य, रिग्वेद नाप एवं जैन साहित्य लौकिक साहित्य, साहित्यिक प्रवृत्तियाँ, प्रतिनिधि रचनाएँ एवं अनाकार, आदिकालीन साहित्यिक विशेषताएँ
खर	(03)	पूर्व मध्यकाल (भक्ति आन्दोलन), भक्तिकाल - उद्भव, विकास, आंदोलन की सांस्कृतिक पृष्ठभूमि, भक्तिकाल का विकास, प्रमुख प्रवृत्तियाँ, विशेषता परंपरा, दार्शनिक विचारधाराएँ
खर	(04)	भक्तिकाल की विभिन्न काव्यधाराएँ - निर्गुण, शानभागी काव्यधारा एवं प्रेमभागी काव्यधारा - परंपरा, प्रवृत्ति एवं उसका विकास।
गुला	(05)	भक्तिकाल की विभिन्न काव्यधाराएँ - रामकृत काव्यधारा, रामभक्ति काव्यधारा - परंपरा, प्रवृत्ति एवं विकास - भक्तिकाल - स्वर्णयुग के रूप में विवेचना।
नवरी थम गुला		वस्तुनिष्ठ प्रश्न - अतिव्यक्ति प्रश्नों के उत्तर संक्षेप में दीजिएगी

(डॉ० नीला रजिपूत)

एम० ए० हिन्दी प्रथम सेमेस्टर
द्वितीय पुस्तक - प्राचीन एवं मध्यकालीन काव्य
शिक्षण योजना [सत्र 2023-24]

माह	इकाई	शिक्षण बिन्दु
जुलाई	(01)	चन्द्रशेखरदास - पृथ्वीराज रासो - संपादक - अमर्या हरिचारी प्रसाद द्विवेदी डॉ० नामवर सिंह (पुस्तकालय समय)
अगस्त	(02)	विद्यापति पदावली - संपादक - रामवृक्ष बेनीपुरी (प्रारंभिक 10 पद)
सितम्बर	(03)	कबीर भ्रंथावली - संपादक डॉ० श्यामसुन्दरदास (50 सारिका)
अक्टूबर		कबीर - पदक्रमांक - 11, 16, 24, 26, 27, 45, 49, 64, 70, 72, 89, 93, 110, 111, 268
नवंबर	(4)	गुरुदेव की अंग, सुमिरण की अंग, पस्या की अंग, माया की अंग। मलिक मोहम्मद जायसी - पदमावली (नूतन विमोचन) (सिद्धलक्ष्मी पत्र)
दिसम्बर	(05)	दुतपाठ के रचनाकार - अमीर खुसरो, मीराबाई शेराना, रसखान
जनवरी प्रथम सप्ताह		वस्तुनिष्ठ प्रश्नोत्तर

(डॉ० नीता राधिका)

Teaching Plan : Dept. of commerce

Session : 2023-24

Class : B.COM.PART- 1

Subject : Business Regulatory Frame Work

Month	Proposed Work
July	Unit- I Law of contract (1872) -I: Nature of contract classification; offer and acceptance.; capacity of parties to contract, free consent, considerations,
Aug.	Unit- I Legality of object; Agreement declared void. Unit -II Special contracts; Indemnity & Guarantee, Bailment and pledge;
Sep.	Unit -II - Law of Agency- Meaning Modes of creating Agency, Types of Agents, Personal Liability of an Agent and Termination of Agency.
Oct.	Unit-III Sale of Goods Act (1930): Definition, Sale & Agreement to sell, Types of Goods, Conditions & Warranties, Sale by Non-owners, Unpaid Seller, CIF, FOB and Ex-Ship Contracts.
Nov.	Unit IV Negotiable Instrument Act (1881) Definition of Negotiable instrument; Feature; promissory note; Bill of exchange cheque; Holder and holder in the due course; crossing of a cheque, types of crossing
Dec.	Unit IV Negotiation; dishonor and discharge of negotiable instrument, Information technology Act 2000 and cybercrime Act 2012 related to e-Business only
Jan.	Unit V The consumer protection Act 2019: Main provision, Definition of consumer, consumer Disputes, Grievances redressal machinery; Indian partnership Act 1932, Limited Liabilities partnership Act 2008, Introduction of Intellectual property Right Act - Copyright, Patent & Trademark.
Feb.	Unit V Indian partnership Act 1932, Limited Liabilities partnership Act 2008, Introduction of Intellectual property Right Act - Copyright, Patent & Trademark.

B. Kom
ASST. Prof.

Month	Proposed Work
july	Unit- I Introducing Business Communication: Definition, Concept and Significance of communication. Basic forms of communications; communication Models and Process: Principal of Effective communication; Theories of communication;
Aug.	Unit- I Self-Development and Communication Development of Positive pers attitude. SWOT analysis. Communication: Ethics. Business Language.
Sep.	Unit -II Corporate communication: Formal and Informal communication Network; Grapevine; Miscommunication (Barriers) and improving communication, Practices in Business communication Group Discussi Seminar.effective listening. - Principle of effective listening, Factor of effective listening exercises, Oral. Written and Video session, Audienc analysis and feedback.
Oct.	Unit-III Writing skill Business letters Definition, Concepts, Structure, Advantage, Disadvantage. need and kinds of business letter. Essential: Effective Business letter, Good news and bad New letters, Office memorandum Writing Resume and letter of Job Application.
Nov.	Unit IV Report Writing: Introduction to a Proposal, Short report and formal report, report preparation.Oral Presentation Principles of Oral Presentation,
Dec.	Unit IV Factor effecting Presentation, Sales Presentation, Training Presentation conducting surveys, Speeches to Motivate, Presentation skill.
Jan.	Unit V Non- Verbal Aspects of communicating, Body Language: K kinesics, Proxemics, Para Language. Interview skills: Appearing in Interviews; Conducting I interview; mock Interview.
Feb.	Unit V Modem for ins of Communicating: Fax; E-Mail; video Conferencing; etc international Communication for globe business.

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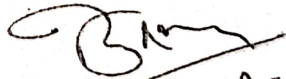
Teaching Plan : Dept. of commerce

Session : 2023-24

Class : B.COM.PART- 2

Subject : COST ACCOUNTING

Month	Proposed Work
July	Unit- I Introduction: Nature and scope of Cost accounting ;cost concepts and classifications ; methods and techniques ; Installation of costing system ; concept of audit .
Aug.	Accounting for Material control ; Concepts and techniques ; Pricing of material issues ;Treatment of material losses. Unit Test
Sep.	Unit –II Accounting for labour : Labour cost control procedure ; Labour turnover ; Idle time and overtime ;Methods of wage Payment – time and piece rates ; Incentives schemes .
Oct.	Accounting for Overheads ;Classification and departmentalization ;absorption of overheads; Determination of overhead rates ;under and over absorption, and its treatment. Unit Test
Nov.	Unit-III Cost ascertainment : unit costing ;job ,batch and contract costing . Unit Test
Dec.	Unit IV Operating costing ;process costing –excluding inter- process profits, and joint and by – products. Unit Test
Jan.	Unit V cost Records ; Integral and non – integral system ; reconciliation of cost and financial accounts .
Feb.	Break even Point Unit Test


ASST. PROF.

Govt. Nehru P.G. College Dongargam

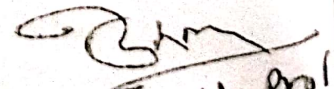
Teaching Plan : Dept. of commerce

Session : 2023-24

Class : M.com 3rd semester

Subject : ADVANCED COST ACCOUNTING

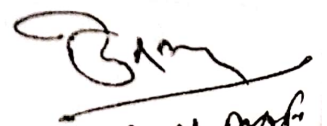
Month	Proposed Work	Month
July	Unit- I Introduction – Cost Analysis, concepts and classification, Materials control – Techniques of Materials control. Unit Test	July
Aug.	Unit –II Labour cost – Computation and control, Overheads – Accounting and Control. Unit Test	Aug.
Sep.	UNIT –III Job, Batch, Contract costing And operating costing. Unit Test	Sep.
Oct.	UNIT –IV Process Costing, Joint products & By – products costing Uniform costing and Estimate costing Unit Test	Oct.
Nov.	UNIT –V Budgetary control – Importance of budgets in accounting. Nature of budgetary control, Organization for budgetary control preparation zero base budgeting, performance budgeting. Cash Budget, Production and sales Budget. Unit Test	Nov.
		Dec.
		Jan.
		Feb.


Asst. Prof

Month	Proposed Work
July	Unit -1 Introduction : Meaning and objectives of auditing; Types of audit; Internal audit. Audit Process : Audit program; Audit note books; Working papers and evidences. Unit Test
Aug.	Unit -2 Internal Check System : Internal control. Audit Procedure : Vouching : Verification of assets and liabilities. Unit Test
Sep.	UNIT-3 Audit of Limited Companies : a. Company auditor - Appointment, powers, duties, and liabilities. b. Divisible profits and dividend.
Oct.	Unit-3 Auditor's report - standard report and qualified report. d. Special audit of banking companies. e. Audit of educational institutions. f. Audit of Insurance companies. Unit Test
Nov.	Unit-4 Investigation : Investigation; Audit of non profit companies, a. Where fraud is suspected,
Dec.	Unit-4 b. When a running a business is proposed. c. Varifications & Valuation of assets Unit Test
Jan.	Unit-5 Recent Trends in Auditing : Nature and significance of cost audit; Tax audit; Management audit.
Feb.	UNIT-5 Company auditing - Qualification, Appointment, Resignation and liabilities. Unit Test

B. K. Singh
Asst Prof.

Month	Proposed Work
July	UNIT-I. Customs : Role of customs in international trade; Important terms and definitions goods; Duty; Exporter; Foreign going vessel; Aircraft goods; Import; Import Manifest; Importer; Prohibited goods; Shipping bill; Store; Bill of lading; Export manifest; Letter of credit; Kinds of duties - basic, auxiliary, additional or countervailing; Basics of levy ad valorem, specific duties; Prohibition of export and import of goods, and provisions regarding notified & specified goods;
Aug.	Import of goods - Free import and restricted import; Type of import - Import of cargo, import of personal baggage, import of stores. Clearance Procedure - For home consumption, for warehousing for re-export; Clearance procedure for import by post; Prohibited exports; Canalised exports; Export against licensing; Type of exports export cargo, export of baggage; Export of cargo by land, sea, and air routes.
Sep.	UNIT-II State Excise, CENVAT. Detail study of State Excise during calculation of Tax.
Oct.	UNIT-III INTRODUCTION TO GOODS AND SERVICES TAX (GST) - Objectives and basic scheme of GST, Meaning - Salient features of GST - Subsuming of taxes - Benefits of implementing GST, Structure of GST (Dual Model) - Central GST - State / Union Territory GST - Integrated GST GST Council: Structures Power and Functions. Provisions for amendments.
Nov.	UNIT-IV Registration under GST: Procedure for registration, Persons liable for registration, Persons not liable for registration, Compulsory registration. Exempted goods and services - Rates of GST.
Dec.	Procedure relating to Levy: (CGST & SGST): Scope of supply, Tax liability on Mixed and Composite supply, Time of supply of goods and services, Value of taxable supply. E-way-Billing
Jan.	UNIT-V ASSESSMENT AND RETURNS - Input tax Credit: Eligibility, Apportionment, Inputs on capital goods, Distribution of credit by Input Service Distributor (ISD) Furnishing details of outward supplies and inward supplies, First return, Annual return and Final return
Feb.	Distribution of credit by Input Service Distributor (ISD) Furnishing details of outward supplies and inward supplies, First return, Annual return and Final return



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Teaching Plan Commerce Department

Subject : Corporate Legal Framework

Session: 2023-24

Class: M.COM. – 1st semester

Month	Proposed Work
July	Unit –1 The Companies Act, 1956 (Relevant Provisions): Definition, types of companies Memorandum of association; Articles of association; Prospectus; Share capital and membership.
Aug.	UNIT –2 Meeting sander solutions-Company management; Managerial remuneration; Winding up and dissolution of companies.
Sep.	UNIT-3 The Negotiable Instruments Act, 1881-Definition, types of negotiable instruments; Negotiation; Holder and holderin due course; payment in due course.
Oct.	UNIT-4 Endorsement and crossing of cheque; Presentation of negotiable instruments.
NOV.	UNIT-5 Legal Environment for Security Markets: SEBI Act. 1992 organisation and Objectives of SEBI

BAV
ASSA P.D.F.

G. College Dongargarh
Teaching Plan Commerce Department
Subject : Managrial Economics

Session: 2023-24

Class: M.COM. – 1st semester

Month	Proposed Work	Month
July	Unit –I Nature and Scope of Managerial, Economics: Objective of a firm; Economic theory and managerial theory; Managerial economist's role and responsibilities	July
Aug.	UNIT –2 Fundamental economic concepts-incremental principle opportunity cost principle, discounting principle. equimarginal principle.	Aug.
Sep.	UNIT-3 Demand Analysis: Individual and Market demand functions Law of demand; determinants of demand; Elasticity of demand-its meaning and importance, Price elasticity income elasticity and cross elasticity; Using elasticity in managerial decisions	Sep. Oct.
Oct.	UNIT-4 Theory of consumer Choice: Cardinal utility approach, indifference approach, revealed preference and theory of consumer choice under risk; Demand estimation for major consumer durable and non-durable products; Demand forecasting tech. technique.	Nov. De Ja
NOV.	UNIT-5 Production Theory: Production function-production with one and two variable inputs, Stages of production; Economics of scale; Estimation of production function.	F

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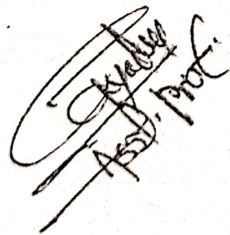
Teaching Plan : Dept. of commerce

Session : 2023-24

Class : B.COM.PART- 3

Subject : INCOME TAX

Month	Proposed Work
July	Unit- I Basic Concepts: Income, agricultural Income, casual income, assessment year, previous year, gross total income, total income, person. Basis of charge: Scope of total income, residence and tax liability. Unit Test
Aug.	Unit -II Heads of Income: Salaries
Sep.	Income from House Property Unit Test
Oct.	Unit-III- Profit and gains of business or Profession, including provisions relating to specific business; Capital Gains. Unit Test
Nov.	Income from other sources Unit IV Computation of Tax Liability: Set-off and carry forward of losses; Deduction from gross total income. Aggregation of income; Computation of Total income. Unit Test
Dec.	Calculation of Tax Liability of Individual and Hindu Undivided Family (HUF)
Jan.	Unit V Tax Management : Tax deduction at source; Advance payment of Tax; Assessment procedures; Tax Planning for individuals. Tax evasion, Tax Avoidance and Tax planning
Feb.	Administration : Authorities, appeals, penalties, Preparation of return of income - Manually and Online. Unit Test


Asst. Prof.

Subject : Business Mathematics

Month	Proposed Work
July	<p>1 Average: Meaning, characteristics, uses, merits & demerits and limitations</p> <p>Simple and combined average, change in term value, speed average, weighted average, algebraic problems! Calculation of average in case of large number of terms.</p> <p>Percentage- Meaning and utility, rules related to percentage, number, election, examination, income expenditure, consumption, mixture, problems related to population.</p>
Aug.	<p>Ratio- Meaning and characteristics, comparison of ratios, division of ratios, calculation of real numbers on basis of ratios, adding or subtracting the same number in terms of ratio, practical use of ratio in business and consolidation.</p> <p>Proportion- Meaning, Characteristics, Difference in ratio and proportion, Problems related to Continuous Proportion, Indices Proportion, Mix ratio.</p>
Sep.	<p>UNIT-II Commission and Brokerage- Meaning, types of business agency, cash and redemption transactions, commission before and after bonus benefits, problems related to the word prior/ due amount.</p> <p>Discount- Meaning and types, problems related to trading discount, cash discount, sequential discount and equivalent discount rate.</p> <p>Profit and Loss- Cost or purchase price, selling price, profit, loss, gross profit, concept of gross profit, percentage profit loss, purchase one seller, discount, commission related problems.</p>
Oct.	<p>UNIT-III Matrices- Meaning and definitions, types of matrix, Algebra of matrix, transposed matrix</p> <p>Determinants- Meaning and definitions, minor, co-factor, calculation of values of determinants up to third order, Laplace's method, Sarru's method</p> <p>Preparation of Invoice- Meaning, Contents, Advantages and types of Invoice, Methods of preparing invoice.</p>
Nov.	<p>UNIT-IV Logarithms and Antilogarithms- Meaning, properties, fundamental laws and types, practical use of logarithm and antilogarithm table</p>
Dec.	<p>Simple and Compound interest- Principal, amount, concept of real and nominal rate of interest, difference between simple interest and compound interest, practical problems related to interest, time, rate, principal and amount. Calculation of interest by third, tenth and tenth rule and common multiplier method.</p>
Jan.	<p>UNIT-V Vedic mathematics - Brief history of Vedic mathematics in Indian knowledge tradition, methods and practice of quick calculation of addition, multiplication, division, square and square root of numbers through Vedic mathematics, method of quick verification of answers from Digit Sum.</p>
Feb.	<p>Simultaneous equations- Meaning, characteristics, methods of solving equations in two variables- Graphical, Substitution, Elimination and Cross multiplication.</p>

Month
September
October
November
December
January
February
March

Signature
A. Prof

Govt. Nehru P.G. College Dongargarh

Teaching Plan : Commerce dept.

Session:- 2023-24

Class: B. Com. 2nd year

Subject: Principles of Business Management

Month	Proposed Work
September	Unit –I Introduction : Concept ,nature , process, and significance of management ; management roles (mint zber g);An overview of functional areas of management ;Development and neo-classical systems ;Concept approaches .
October	Unit-II Planning : Concept ,process , and types .Decision making – concept and bounded rationality ;management by objective ;corporate planning ;Environment analysis and diagnosis ; strategy formulations.
November	Unit- III Organizing : : Concept ,nature , process, and significance; Authority and resident relationships ; Centralization and decentralization departmentation ; Organization structure - forms and contingency factors . Departmentation ; Organization structure - forms and contingency factors
December	Unit –IV Motivation and Leading People at work ;Motivation – Concept ; Theories Herzberg , McGregor ,and ouchi; financial and non financial incentives.
January	Leadership – Concept andLeadership Styles ; Leadership Theories (Tannenb Schmidt .); Likert’s system management . Communication – Nature ,Process ,Networks and Barriers, Effective Communication.
February	Unit V Managerial control :Concept and process ; effective control system ; technical control –traditional and modern .
March	Management of change ; concept ,nature and process of planned resistance to change ; emerging horizons of management in a environment .

~~X~~ C.



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Teaching Plan : Dept. of commerce -

Session : 2023-24

Class : M.com 3rd semester

Subject : Accounting for managerial decisions

July	UNIT - 1 Break-even-analysis; Assumptions and practical applications of break-even-analysis; cost volume profit analysis, Decisions regarding sales-mix, make or buy decisions and discontinuation of a product line etc. Unit Test
August	UNIT - 2 Analyzing financial Statements: Method, objects and ratio analysis. Unit Test
September	UNIT - 3 Cash flow analysis and Fund flow analysis. Unit Test
October	UNIT - 4 Contemporary Issues in Management Accounting: Value chain analysis; Activity bases costing, Quality costing, Target and life cycle costing. Unit Test
November	UNIT - 5 Reporting to Management: Objectives of reporting, reporting needs at different managerial levels, Types of, reports, modes of reporting, reporting at different levels of management. Unit Test

Handwritten signature:
A. S. Prasad

एम. ए. तृतीय ब्रह्मस्तर

प्रश्न पत्र - III
कामकाजी हिन्दी एवं पत्रकारिता

हिन्दी के विभिन्न रूप
कार्यालयीन हिन्दी राजभाषा के प्रकार्य

पारिभाषिक शब्दावली

कम्प्यूटर - क्षेत्र, उपयोगिता, वेब पेज

इंटरनेट, हिन्दी स्मार्टवेयर पैकेज।

पत्रकारिता का स्वरूप, हिन्दी पत्रकारिता का
इतिहास।

लीड, इन्ट्रो, पृष्ठ सज्जा

साप्ताहिकार, प्रेस।

संपादन कला, प्रेस कागून आधार सहित।

शीर्षक।

पाठ्यक्रम पुनरावृत्ति।

एम. ए. प्रथम सेमेस्टर - हिन्दी
प्रश्न पत्र - चतुर्थ

रुक्मिणी (नोटिक - जयशंकर प्रसाद।
भीष्म खानी - हाबुश।

अंधायुग - धर्मवीर भारती।

रीढ़ की हड्डी - जगदीशचन्द्र माथुर।

एक दिन - लक्ष्मीनारायण मिश्र

ताँबे के कीड़े - भूवनेश्वर।

तौलिया - उपेन्द्रनाथ अशक।

पथ के बगिची - सूर्यकांत त्रिपाठी 'निराला'।

महादेवी वर्मा - बरभरत।

आवाजा मस्तीहा - विठ्ठल प्रभाकर।

पूठन भाग - । ओम प्रकाश वाहमीकी।

पाठ्यक्रम की पुनरावृत्ति।

जी ए. इस्ट यूएस

हिन्दी भाषा प्रश्न पत्र - प्रथम

पल्लवन, पञ्जाचार, अनुवाद ।

एक टोकरी भर मिट्टी : भाद्यवराव स्वप्ने ।
बड़े भाई सोहन : मुंशी प्रेमचन्द ।

संक्षेपण, हिन्दी में संक्षिप्तकरण
पारिभाषिक शब्दावली

हिन्दी - अपठित गद्यांश ।

हिन्दी में पद्यनाम, मुहावरे एवं लोकोक्तियाँ ।
जागो फिर एक बार : सुर्यकान्त त्रिपाठी मिश्रा ।

जन्मदिन : एकान्त श्रीवास्तव ।

शब्द श्रुति, वाच्य श्रुति ।

शब्द ज्ञान, पर्यायवाची शब्द, विलोम शब्द ।

अनेकार्थी शब्द, समस्तुत शब्द, अनेक शब्दों के लिए
एक शब्द ।

मोलाशम का जीव - हरिश्चन्द्र परबसाई ।

जीव पर स्वकार रीतियाँ - शब्द जोशी ।

मानक भाषा - अर्थ व स्वरूप ।

अमानक भाषा ।

शिकागो से स्वामी विवेकानन्द का पत्र ।

सत्य व अहिंसा - महात्मा गांधी ।

देवनागरी लिपि

कम्प्यूटर

कम्प्यूटर का विकास - सी. आर. रेड्डी ।

- भातभूमि - आ. नरेन्द्र प्रे।
चोरी और प्रायश्चित - महात्मा गांधी।
- हरिठाकुर - डॉ. धूमचन्द्र बघेल।
सम्भाषण कुशलता - पं. माधवराव सापे।
र - हिन्दी भाषा और उसके विविध रूप।
कार्यालयीन भाषा, मीडिया की भाषा,
विन्त एवं वाणिज्य की भाषा,
ग्रामीणी भाषा।
र - हिन्दी की व्याकरणिक कोटियाँ -
संज्ञा, सर्वनाम
र - विश्लेषण, क्रिया विश्लेषण।
संज्ञा
र - संधि एवं संधिजिन्याँ
र - अनुवाद व्यवहार।
र - पाठ्यक्रम की पुनरावृत्ति।

Asinhs
नीलम सिन्हा
अतिथि व्याख्याता
हिन्दी

Teaching Plan 2023-24

~~Part~~ Part II, Paper-IInd
Money, Banking and Public
Finance.

July 2023 - Basic concept - Money,
meaning and functions, Grasham's
law - Quantity theory of Money -
Cash transaction and Cash balance
approaches: value of Money.
Inflation, deflation and recession
types, Causes and effects on
different sectors of the economy.

August 2023 - Demand and Pull
and Cost Push inflation, Measures
to control inflation, Philips Curve
Concept of demonetization.

Commercial banking - Meaning and
types - function of commercial
banking. The process of credit
creation. Purpose and limitation,
Liabilities and assets of banks -
September 2023 - Evolution of Commercial
banking after Independence.

Nationalization, Functions
Central bank, Quantitative and
Qualitative Methods of Credit
Bank Rate Policy, Open Market
Operation, Variable Reserve
and Selective Methods, Role
function of the Reserve Bank
of India objectives and lines
of Monetary Policy with
reference to India.

October 2023 - Meaning and
of Public finance, Distinction
between Private and Public
Public goods v/s Private goods
The principle of Maximum
advantage, Role of the government
in economic activities: Public
Expenditure - Meaning, Classification
and Principle of Public Expenditure
November 2023 - Trends in Public
Expenditure and Causes

Public expenditure in India.
Sources of Public revenue - Taxation,
savings, Loans and classification
of taxes, Division of tax burden
December-2023 - The benefit and

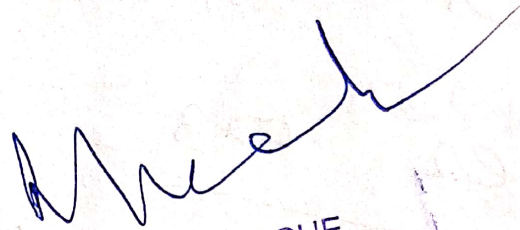
ability to pay approaches - Impact
and incidence of taxes, Taxable
capacity, Effects of taxation,
characteristics of good tax system

January-2024 - Equity and
justice in Taxation, Major trends
tax revenue of the Central
and State government in India.
Public debt and financial
administration - sources of Public
borrowing, Effects of Public
debt, Methods of debt redemption

February 2024 - The Public budget -
Kinds of budget, Economic and
functional classification of the
Budget,

Preparation and Passing in India.

of



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① Teaching Plan (2023-24)
Department of Economics
B.A. Part I MICRO ECONOMICS

Paper - I

June - July 2023

Introduction - Definition, Nature and scope of Economics, Methodology in Economics. Utility Cardinal and ordinal approaches, Indifference curve, Consumer's equilibrium (Hicks and Slutsky), Giffen goods, Composite demand, Demand - Law of demand.

August 2023 - Elasticity of demand -

Price, Income and elasticity
Consumer's surplus, Engel curve.

Theory of Production and cost -

Production decision, Production function, Iso-quant, Factor substitution

Law of variable proportion, Return to scale, Economies of scale, Different Concept of cost and their interrelation

Interrelation

September 2023 - Equilibrium of the firm

Expansion, Factor Market Structure Perfect

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② and imperfect markets of a firm, Perfect competition, Monopoly and Price discrimination
October 2023

Measures of Monopoly, Monopolistic competition, Duopoly, Taxation and Equilibrium of a firm, Monopsony, Controlled and administered prices.

November 2023

Factor Pricing - Marginal Productivity, Theory of distribution, Theories of wage determination, Wages and Collective Bargaining, Rent - Scarcity Rent, Differential Rent, Quasi Rent, Modern Rent
December 2023

Theory of interest, Classical and Keynesian Theory, Modern theory

January 2024 - Product

risk bearing and uncertainty
theories - welfare Economics.
problems of Measuring welfare.
bromley 2004

- classical welfare economics,
Pareto's criteria, value judgement,
concept of a social welfare
function, Risk bearing and
cost function, compensation
principle - Kaldor, Hicks

Amish

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Teaching Plan (2023-24)

Part III Development and Environmental Economics Paper - Ist

July 2023 Economics growth and development, factor effecting economic growth (Labour, Capital and Technology) developed and under developed economy, poverty - absolute & relative, Marxian Model of economic growth, Kaldor Model of economic growth, balanced and unbalanced growth.

August 2023 - Proponents of population and growth, Pattern of population, theory of demographic transition, Population, poverty and environment, Scumpeter's theory of economic growth, theory of Big-push, Nelson theory of low income equilibrium trap, Theory of critical minimum efforts

②
September-2023 - Harrod and
growth Model, Skolow's Model
economic growth Meades
classical Models, Mrs John R
growth Model.

October 2023 - A Lewis the
of unlimited supply of labor
Environmental use. Environment
disruption as an allocation
valuation of environmental damage
land, water, air & forest.

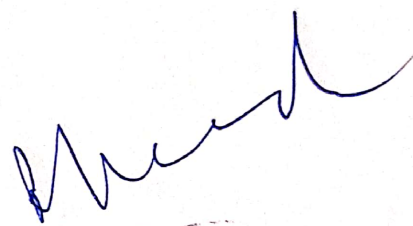
November 2023 - Prevention
and abatement of population
of policy in instruments in
countries, environmental legal
indicators of sustainable development
Environmental Accounting.

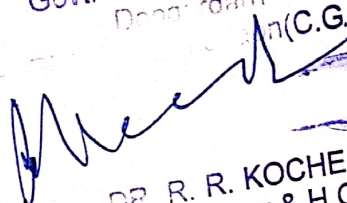
December 2023 - Concept of Human
Capital - food security, Education
Health and Rehabilitation. Role
of agriculture in economic development.

January-2024 - 1st vol. 2 Affid

activity in agriculture, New techniques
and Sustainable agriculture.

major 2014 → Globalization and
agriculture growth, the choice of
techniques, appropriate technology
employment.

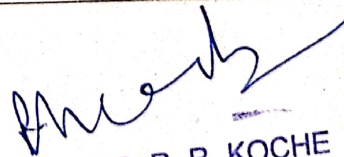

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Teaching Plan- 2023-24
Department of Economics

SEMESTER-I
Micro Economics
Paper – I

Month	Teaching syllabus
July 2023	Unit – I - Introduction: Concept of Equilibrium, Economic Models, Neo Classical Demand Analysis. Elasticity of Demand (Price, Income & Cross), Elasticity of supply, Unit test.
August 2023	Unit – II - Indifference curve, Marginal Rate of Substitution. Income & substitution effect, Hicks and Slutsky theorem, Revealed preference theory. Hicks's Revision of Demand, Hicksian Consumer surplus, Unit test.
September 2023	Unit-III Theory of Production Production function, The short period & long period production function, the law of variable proportion (isoquant approach), Marginal rate of Technical Substitutions, Returns to a factor and returns to scale. Expansion path, Cobb-Douglas Production function, CES production function, Unit test.
October 2023	Unit-IV Theory of cost and Revenue analysis, Perfect Competition equilibrium of firm in Perfect Competition. Monopoly short run and long run equilibriums, price discrimination under monopoly competition, monopoly control and regulation. Comparison between monopoly and perfect competition, Unit test.
November 2023	Unit - V Monopolistic Competition - price and output determination under monopolistic competition, Group equilibrium, theory of excess capacity. Oligopoly non- collusive oligopoly model: The kinked demand curve. The collusive oligopoly - Cartels: joint profit maximization or perfect cartels, price leadership: the low cost price leadership model, Unit test.



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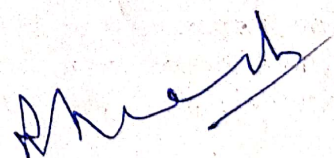
Teaching Plan- 2023-24

Department of Economics

Macro Economics

Paper – II

Month	Teaching syllabus
July 2023	Unit – I - National Income and Accounts – Concept of National Income and National Product, Problems of Measurement, Different forms of National Income Accounting – Social Accounting, Input Output Accounting, Flow of Funds, Balance of Payment – Accounting. Circular flow of Income – Two, Three and Four Sector Economy, unit test.
August 2023	Unit – II - Classical Theory of Employment, Say's Law of Market, Principle of Effective Demand, Keynesian & Pigou Theory of Employment, Comparison of Classical and Keynesian Models. National Income Determination of Keynesian Model - Two, Three and Four Sector Economy.
September 2023	Unit-III Consumption Function- Keynesian Psychological Law of Consumption, Short Run & long run Consumption Function. Theory of Consumption Function – Absolute Income Hypothesis, Duesenberry's Relative Hypothesis, Life Cycle and Permanent Income Hypothesis, Unit test.
October 2023	Unit-IV Investment Function- Marginal Efficiency of Capital and Investment. Saving and Investment Equality, Multiplier and its working, Accelerator and its working, Super - Multiplier. Supply of Money, Determinants of Money Supply, Measurement of Money supply, Control of Money Supply. High Powered Money, Money Multiplier, unit test.
November 2023	Unit - V Demand for Money –Fisher and Cash Balance (Cambridge) Approach, Fundamental Equation of Keynes. Friedman's re-formulation of the quantity theory of money. Post Keynesian Approach to Demand for Money- Patinkin, Baumol's, James Tobin, Friedman, and Gurley & Shaw's Approaches, unit test.


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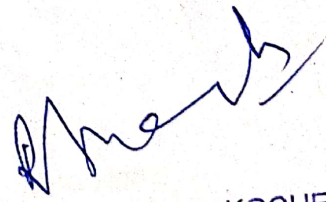
Teaching Plan- 2023-24

Department of Economics

SEMESTER-I
Statistical and Quantitative Methods
Paper III

Teaching syllabus

Month	Teaching syllabus
July 2023	<p>Unit – I - Skewness - Symmetrical and asymmetrical distribution, Measurement of Skewness - Karl Pearson Bowley. Simple Correlation- Measurement of Correlation, Karl Pearson's Coefficient of Correlation & Spearman's rank correlation. Coefficient of correlation by the method of least square. Probable Error & Standard Error in correlation, Coefficient of determination of correlation, unit test.</p>
August 2023	<p>Unit – II - Regression Analysis, Regression and Correlation, regression lines & regression coefficient, regression equations, Simple regression analysis, multiple regression analysis (Up to three variables only), Standard Error of the estimates of simple regression analysis. Interpolation and Extrapolation - Method of Fitting a Parabolic Curve, Newton's Advancing Difference Method, Direct Binomial Expansion Method and Lagrange's Method, unit test.</p>
September 2023	<p>Unit- Association of Attributes - Meaning and types of association, Consistency of data, Methods of determining association, Methods of Comparison Proportion Coefficient of Association using Yule's method. Probability theory- Meaning and definition, Permutation and Combination, Types of events, Measurement of Probability, Addition and Multiplication theorem, Conditional Probability, unit test.</p>
October 2023	<p>Unit-IV - Index Number_ Construction of Index numbers, simple and weighed Index numbers, Fisher's Ideal Index number, Reversibility Test, Time Reversibility & Factor Reversibility, Chain Index No, unit test.</p>
November 2023	<p>Unit - V - Time Series Analysis - Components of Time Series, Measurement of long-term Trend, Short period oscillation, semi-average method, moving average method, Graphical Presentation, unit test.</p>



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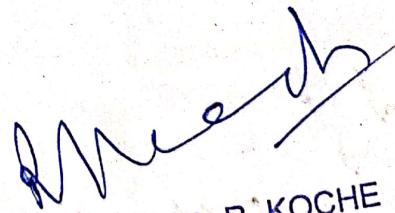
Teaching Plan- 2023-24

Department of Economics

SEMESTER- I INDIAN ECONOMY Paper -IV

Teaching syllabus

Month	Teaching syllabus
July 2023	Unit – I - Indian Economy: Meaning, basic characteristics and major issues of development of Indian Economy, GDP and National Income of India – Components and Structure of GDP, Role of Primary, Secondary and Tertiary Sectors in GDP, National Income and Per Capita Income, Growth Rates of GDP and Per Capita Income. unit test.
August 2023	Unit – II - Demographic Features of India – Size, Growth Rate, Sex Ratio, Age - Composition, Literacy and Density of Population, Migration, Rural -Urban Migration, Urbanization and Civic Amenities, Occupational Structure, National Population Policy, Demographic Features of Chhattisgarh State, unit test.
September 2023	Unit-III , Agricultural Development in Indian Economy – Agricultural Growth and Productivity, Causes of Low Productivity and Measures to Increase it, Agricultural Marketing and Warehousing, Institutional Structure - Land Reforms in India, The Green Revolution, National Agricultural Policy and Food Security in India, Rural credit in India, NABARD and its role in rural credit, unit test.
October 2023	Unit-IV Industrial Development in India, Industrial Policies of 1956 and 1991, Public Sector Enterprises and their Performance, Privatization and Disinvestment, Small Scale Sector and Minor Medium Enterprises, Unorganized Sector and Informalization of the Indian Economy and Knowledge Economy, unit test.
November 2023	Unit - V - Infrastructure- Infrastructure and Economic Development, Energy, Power, Transportation- Road, Railway, Water and Civil Aviation in India, Private Investment in Infrastructure: Outlook and Prospect, Concept of Social Sector and Social Infrastructure, Education, Health and Family Welfare, unit test.




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Teaching Plan- 2023-24

Department of Geography

M.A. Geography- I Semester

Month	Unit	PAPER- I - GEOMORPHOLOGY	PAPER- II - Climatology
July 2023	Unit - I	Nature and scope of Geomorphology; Fundamental concepts; Interior of the earth; Earth movement: epeirogenic and orogenic movements With reference to the evolution of the Himalaya: Forces of Crustal instability, Isostasy, Geosyncline, Plate tectonic, Mountain building, Earthquake and Vulcanicity.	Nature and scope of climatology and its relationship with meteorology; composition of atmosphere; Insolation, heat balance of the earth, stability and instability, greenhouse effect, vertical and horizontal distribution of temperature.
August 2023	Unit - II	Exogenic processes: concept of gradation; Agents and processes of gradation: weathering, wasting and erosion, aggradation; Climatic Geomorphology and morphogenetic regions; slope evolution, Arid Semi-Arid and Karst topography.	Jet stream; General circulation in the atmosphere; Acid rain; concept of air masses and Front. EL Nino and La Nino. Monsoon winds and cyclones.
September 2023	Unit - III	Concept of Geomorphic cycle and its controversy; Dynamic of glacial and periglacial processes and resulting landforms, Complications of fluvial geomorphic cycle and resulting landforms. Practical Starts	The application of general principles of elementary physical and synoptic meteorology to the study and classification of climate. Climatic classification of Koeppen and Thornthwaite. Major climate of the world- tropical, temperate, desert and mountain climate. Practical Starts
October 2023	Unit - IV	Geological structure and landform: development of landscape and drainage on uniclinal, folded and domal structures and Erosion surfaces, Applied Geomorphology.	Climatic changes during geological and historical times, evidences, possible causes, global warming, Applied climatology.
November 2023	Unit-V	Practical complete and Unit Revised	Practical complete and Unit Revised
December 2023	Semester Exam		


 आचार्य भूगोल विभाग

Teaching Plan- 2023-24

Department of Geography

M.A. Geography- I Semester

Month	Unit	PAPER- III - Geographical Thought	PAPER- IV- Geography Of India
July 2023	Unit – I	The Field of geography, its place in the classification of science, geography as a social science, and natural science. Definition, scope and functions of geography; Geography as science of relationship, as science of areal differentiation, as spatial science, Spatial Organization, Geography and environmentalism: forms of man-nature relationship and current view; Dualism in geography; Regional Concept.	Physical and Biological elements in the Geography of India: Geological structure, relief, climate, Drainage, vegetation and soils.
August 2023	Unit – II	The growth of geographical knowledge from earliest times up to the 15th century. Contributions of Greek and Roman thinkers. Geographical information in Ancient Indian literature. The Great Age of Maritime Discovery and Exploration. Contributions of various schools of thought in modern Geography: (i) German School - A.V. Humbolt, Carl Ritter. Friedrich Ratzel (ii) French School - Vidal-De-Blache, Jean Brunhes (iii) British School - H.J. Mackinder, L.D. Stamp (iv) American School - E.C. Semple, G. Taylor	Agriculture: Major characteristics and problems, Impact of infrastructural and institutional factors on agriculture. Important crops-wheat, rice, cotton, sugarcane, oil-seeds, tea and coffee, Agricultural regions. Green revolution, Agro-climatic regions.
September 2023	Unit - III	Scientific explanations: routes to scientific explanation (inductive/deductive); Type of explanation: cognitive description, cause and effect, temporal, functional/ecological, systems; Laws, theories and models in geography; Quantitative revolution and philosophy of positivism. Practical Starts	Sources of power: Coal; Petroleum, Natural gas. Hydroelectricity and Atomic energy. Mineral resources with special reference to iron ore, manganese and bauxite. Industrial development with special reference to iron and steel, cement, cotton, jute, sugar and paper industries; Industrial regions. Practical Starts
October 2023	Unit - IV	Responses to positivism, behaviourism and humanistic, relevance movement and radical geography; Changing paradigms; Status of Indian Geography; Future of Geography	Regional division of India: Purpose and Methodology. Major schemes of regions of India: O.H.K. Spate and R.L. Singh. Physical and cultural geography of Chhattisgarh State.
November 2023	Unit-V	Practical complete and Unit Revised	Practical complete and Unit Revised
December 2023	Semester Exam		

Teaching Plan- 2023-24
Department of Geography
M.A. Geography- III Semester

S.N.	Months	Unit	Paper- I Population Geography	Paper – II Biogeography And Ecosystem
1	July	Unit – I	Definition and scope of Population Geography. Relation of Population Geography with other subjects of social sciences. Historical development of Population Geography in western countries and in India. Sources of population data, Census and its history.	Definition and scope of Biogeography Environment, Habitat and Plant-animal association, Biome Types.
2	August	Unit – II	Distribution of Population: The concept of population density and its types. Factors affecting population distribution. Distribution & Density of population in the world with special reference to Europe, Asia and India. Growth of population: Measure of decennial and annual rates of population growth, prehistoric and modern trends of population growth in the world. Regional aspect of population growth in India. Population theories. Demographic transition.	Elements of plant geography, distribution of forests and major communities. Plant successions in newly formed land forms. Zoogeography and its Environmental Relationship. Palaeo botanical and Palaeo climatological records of environmental change.
3	September	Unit - III	Population composition in terms of age and sex, rural, urban residence, educational status and occupational structure. Significance of these elements in population analysis, factors affecting their composition in population, broad world patterns and detailed spatial patterns in India. Fertility and Mortality of population: Significance and factor. Indices and rates. World pattern and pattern in India. Human Development Index and its Components. practical work start .	Ecosystems: concept and components, Ecosystem-form and function: tropic level, ecological pyramids, ecological niche, energy and nutrients in the ecosystem, hydrological cycle, food chains and food webs. Major terrestrial ecosystems of the world: agriculture, forests, grassland and desert. Population growth and environment.
4	October	Unit - IV	Migration of population: Causes, characteristics and types. Methods of estimating value of internal migration. Important international migrations of the world, internal migration in India: Population and Resources: Population-Resource regions. Population Regions: Concept and methods, population regions of India, population policies of India.	Biodiversity and its Conservation. Preservation and conservation of the ecosystem through resource management, Environment legislation. The Stockholm conference, the Earth summit, Environmental laws in India (the Wild Life Act, Water Act, Forest Act, Environment Protection Act and National Environment Tribunal Act).
5	November	Unit-V	practical work complete . And unite revise.	
6			Semester Exam	

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Teaching Plan- 2023-24
Department of Geography
M.A. Geography- III Semester

S.N.	Months	Unit	Paper- I Settlement Geography	Paper- II Research Methodology
1	July	Unit – I	Meaning, Objectives and Scope of Settlement Geography; Evolution, Distribution, Types and Patterns of Rural Settlements; Rural House Types; Rural Service Centers.	Historical development of remote sensing as a technology - Relevance of remote sensing in Geography - Concepts and basics: Energy source, energy and radiation principles, energy interactions in the atmosphere and earth surface features, remote sensing systems: platform sensors and radiation records. Microwave sensing interpretation of SLAR imageries, thermal imageries.
2	August	Unit – II	Evolution and growth of urban settlements; The Geographical setting of Urban Centers: Site, Situation and Location	Remote Sensing Satellite: platforms LANDSAT, SPOT, NOAA, RADARSAT, IRS, INSAT: principles and geometry of scanners and CCD arrays, orbital characteristics and data products - MSS, TM, LISS I & II, SPOTPLA & MLA, SLAR.
3	September	Unit - III	Rank- size-relationship; Cities as Central Places, Central Place Theory, Growth Centre Theory.	Image Processing: Types of imagery, techniques of visual interpretation, ground verification transfer of interpreted thematic information to base maps-digital processing: rectification and restoration, image enhancement - contrast manipulation, Classification: Supervised and Unsupervised, post-classification analysis and accuracy assessment
4	October	Unit - IV	City- Country Relationship: Umland, Rural-Urban Fringe. practical work start.	Applications: Air photo and image interpretations, arid mapping land use and land cover, land evaluation, urban land use, landform and its processes, weather studies and studies of water resources: integration of Remote Sensing and GIS. Remote sensing and hazard management, remote sensing and environmental management.
5	November	Unit-V	practical work complete . And unite revise.	
6	December	Semester Exam	Semester exam .	

Session - 2023-24

Teaching Plan

M.A. English first Sem.

Paper I (Poetry I)

Month	Unit	Topic
July	Unit - I	Geoffrey Chaucer: Prologue to the Canterbury Tales Edmund Spenser: Epithalamion
August	Unit - II	John Donne: Death, Be not Proud Ecstasie Malediction: Forbidden Mourning
September	Unit - II	Andrew Marvell: To His Coy Mistress, An Horatian ode Upon Cromwell's Return from Ireland, An exortation
October	Unit III	John Milton: Paradise Lost- Book - I
November	Unit - IV	John Dryden: Mac Flecknoe Alexander Pope: The Rape of the Lock
December		Annotation, Revision & Practice

G. Srinivas



Session - 2023-24

Teaching Plan

M.A. English, first Sem.

Paper-II, (Drama-I)

Month	Unit	Topic
July	Unit-I	Christopher Marlowe: The Tragical History of Dr. Faustus Ben Jonson: The Alchemist
August	Unit-II	John Webster: The Duchess of Malbi William Shakespeare: Macbeth
September	Unit-III	William Shakespeare: Hamlet
October	Unit-IV	William Shakespeare: The Tempest
November	Unit-V	William Shakespeare: As you like it.
December		Annotation, Revisions & Practice

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Govt. Nehru P.G. College, Dongargarh

Department Of English

Time-Table, Session – 2023-24

TIME / DAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
10:40 – 11:20	M.A. ENG. 3RD SEM	B.COM. II- YEAR (F.C. ENG.)	B.COM. III- YEAR (F.C. ENG.)	M.A. ENG. 3RD SEM	M.A. ENG. 3RD SEM	M.A. ENG. 3RD SEM
11:20 – 12:00	M.A. ENG. 1ST SEM	B.S.C. II- YEAR (F.C. ENG.)	B.S.C. III- YEAR (F.C. ENG.)	M.A. ENG. 1ST SEM	M.A. ENG. 1ST SEM	M.A. ENG. 1ST SEM
12:00 – 12:40	M.A. ENG. 3RD SEM	M.A. ENG. 3RD SEM	M.A. ENG. 3RD SEM	M.A. ENG. 3RD SEM	B.A. I- YEAR (ENG. LIT.)	M.A. ENG. 3RD SEM
12:40 – 01:00	BREAK					
01:00 – 01:40	M.A. ENG. 1ST SEM	M.A. ENG. 1ST SEM	M.A. ENG. 1ST SEM	M.A. ENG. 1ST SEM	B.A. I- YEAR (F.C. ENG.)	M.A. ENG. 1ST SEM
01:40 – 02:20	B.A. III- YEAR (ENG. LIT.)	M.A. ENG. 3RD SEM	M.A. ENG. 3RD SEM	B.A. III- YEAR (ENG. LIT.)	B.A. II- YEAR (F.C. ENG.)	B.A. III- YEAR (ENG. LIT.)
02:20 – 03:00	B.A. II- YEAR (ENG. LIT.)	B.A. I- YEAR (ENG. LIT.)	B.A. I- YEAR (ENG. LIT.)	B.A. II- YEAR (ENG. LIT.)	B.A. III- YEAR (F.C. ENG.)	B.A. II- YEAR (ENG. LIT.)
03:00 – 05:30	Work Assigned By Principal/IQAC					

Principals

हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

बी.ए. द्वितीय वर्ष

इतिहास

प्रश्न पत्र - प्रथम

प्रश्न पत्र का नाम - भारत का इतिहास 1206 ई. से 1761 ई. तक

इकाई-1 जुलाई
भारत

1. सल्तनतकालीन एवं मुगलकालीन इतिहास के स्रोत
2. दास वंश- ऐबक, इल्तुतमिश, बलबन
3. खिलजी वंश- अलाउद्दीन खिलजी-सैनिक उपलब्धियां, राजस्व व्यवस्था एवं बाजार नियंत्रण
4. तुगलक वंश- मोहम्मद बिन तुगलक,

इकाई-2

इतिहास

1. मुगल साम्राज्य की स्थापना - बाबर एवं हुमायूँ
2. शेरशाह सूरी का प्रशासन
3. अकबर की राजपूत नीति
4. मुगल शासकों की धार्मिक नीति - अकबर से औरंगजेब तक

इकाई-3

अभ्युत्थान

1. मुगल प्रशासन
2. मध्यकालीन सामाजिक एवं आर्थिक दशा
3. भक्ति आंदोलन
4. सूफीवाद

इकाई-4

अभ्युत्थान

1. मध्यकालीन साहित्य, कला एवं स्थापत्य
2. विजयनगर राज्य
3. बहमनी राज्य
4. शिवाजी का प्रशासन

इकाई-5

जनवरी

1. पेशवा- बालाजी विश्वनाथ, बालाजी बाजीराव
2. पानीपत का तृतीय युद्ध- कारण एवं परिणाम
3. मराठों के अधीन छत्तीसगढ़ - बिम्बाजी भोसले
4. छत्तीसगढ़ में मराठा प्रशासन

फरवरी

हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

बी.ए. द्वितीय वर्ष

इतिहास

प्रश्न पत्र - द्वितीय

विश्व का इतिहास 1890 ई. से 1964 ई. तक

- काई-1 नवम्बर
1. विलियम द्वितीय की विश्व राजनीति
 2. अफ्रीका का विभाजन
 3. जापान का आधुनिकीकरण- मेईजी पुनर्स्थापना एवं जापान का आधुनिकीकरण
- काई-2 मार्च
4. रूस-जापान युद्ध : कारण एवं परिणाम
 5. चीन अफीम युद्ध एवं चीन की क्रांति, साम्यवाद
 6. पूर्वी समस्या -बर्लिन कांग्रेस, युवा तुर्क आंदोलन
 7. बाल्कन युद्ध : कारण एवं परिणाम
- काई-3 सितम्बर
1. प्रथम विश्व युद्ध : कारण एवं परिणाम
 2. वर्साय की संधि
 3. रूस की क्रांति 1917 ई.
 4. फासीवाद - मुसोलिनी
- काई-4 मई
1. नाजीवाद -हिटलर
 2. जापान का सैन्यवाद
 3. राष्ट्रसंघ : स्थापना एवं विल्सन के 14 सूत्र
 4. द्वितीय विश्वयुद्ध : कारण एवं परिणाम
- काई-5 सितम्बर
1. संयुक्त राष्ट्र संघ - स्थापना एवं संगठन, उपलब्धियां
 2. शीत युद्ध
 3. गुट निरपेक्ष आंदोलन एवं पंचशील सिद्धान्त
 4. विश्व शांति की चुनौती- कोरिया एवं फिलीस्तीन समस्या
 5. एक ध्रुवीय विश्व
- जनवरी
- फरवरी

राजनीति विज्ञान विभाग
शासकीय नेहरू स्नातकोत्तर महाविद्यालय
डोंगरगढ़, जिला राजनांदगाँव (छ.ग.)

टीचिंग प्लान - सत्र 2023-24...

कक्षा - बी.ए. भाग एक

प्रश्न पत्र - प्रथम - राजनीतिक सिद्धांत

क्र	माह	ईकाई	पाठ्यक्रम
1	जुलाई	ईकाई - 1	राजनीतिक विज्ञान का अर्थ - परिभाषा, कार्य, महत्व, राजनीतिक विज्ञान के रूप
2	अगस्त	ईकाई - 1	शक्ति/सत्ता, प्रभाव का अर्थ, परिभाषा, विशेषताएं, प्रकार, व्यवहारवाद एवं उत्तर व्यवहारवाद
3	सितम्बर	ईकाई - 2	राज्य एवं उसके आवश्यक तत्व, मार्क्सवाद का सिद्धांत, सावयविक सिद्धांत
4	अक्टूबर	ईकाई - 3	सम्प्रभुता एवं उसकी बहुलवादी आलोचना, अधिकार का अर्थ, प्रकार, सिद्धांत, स्वतंत्रता का अर्थ, परिभाषा, प्रकार, विशेषताएं एवं संरक्षण
5	नवम्बर	ईकाई-3	समानता का अर्थ, प्रकार एवं स्वतंत्रता से संबंधित, प्रजातंत्र की परिभाषा, व्यापक अर्थ, परिभाषा एवं सफलता
6	दिसम्बर	ईकाई - 4	शासन के प्रकार, एकात्मक एवं संघात्मक, संसदीय व अध्यक्षीय, निरंकुशतन
7	जनवरी	ईकाई - 4	शासन के अंग, कार्यपालिका, व्यवस्थापिका, न्यायपालिका, शक्ति पृथक्करण का सिद्धांत
8	फरवरी	ईकाई - 5	लोक कल्याणकारी राज्य, दल पद्धती, अर्थ एवं परिभाषा का प्रकार, दबाव समूह, प्रकार, सामाजिक परिवर्तन, विशेषताएं

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राजनीति विज्ञान विभाग
शासकीय नेहरू स्नातकोत्तर महाविद्यालय
डोंगरगढ़, जिला राजनांदगाँव (छ.ग.)

टीचिंग प्लान - सत्र 2023-24.....

प्रा.स. - बी.ए. भाग-दो

प्रश्न पत्र - द्वितीय - तुलनात्मक शासन एवं राजनीति

क्र.	माह	ईकाई	पाठ्यक्रम
1	जुलाई	ईकाई - 1	ब्रिटिश संविधान, विकास एवं विशेषताएं
2	अगस्त	ईकाई - 1	ब्रिटेन की कार्यपालिका, व्यवस्थापिका, न्यायपालिका
3	सितम्बर	ईकाई - 2	संयुक्त राज्य अमेरिका का संविधान, विशेषताएं, कार्यपालिका, व्यवस्थापिका, न्यायपालिका
4	अक्टूबर	ईकाई - 2	शक्ति पृथक्करण व नियंत्रण, संतुलन का सिद्धांत
5	नवम्बर	ईकाई - 3	स्वीटजरलैण्ड का संविधान - विशेषताएं, कार्यपालिका, व्यवस्थापिका एवं न्यायपालिका
6	दिसम्बर	ईकाई - 4	चीन का संविधान - विशेषताएं, कार्यपालिका, व्यवस्थापिका, न्यायपालिका, साम्यवादी दल
7	जनवरी	ईकाई - 5	तुलनात्मक राजनीति का अर्थ, परिभाषा, ईस्टन का व्यवस्था सिद्धांत, आमण्ड का संरचनात्मक प्रकार्यात्मक उपागम,
8	फरवरी	ईकाई - 5	राजनीतिक विकास, राजनीतिक सामाजिकरण, राजनीतिक संस्कृति की अवधारणा

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राजनीति विज्ञान विभाग
शासकीय नेहरू स्नातकोत्तर महाविद्यालय
डोंगरगढ़, जिला राजनांदगाँव (छ.ग.)

टीचिंग प्लान - सत्र ..2023-24..

कक्षा - बी.ए. भाग-तीन

प्रश्न पत्र - प्रथम - अंतर्राष्ट्रीय राजनीति

क्र	माह	ईकाई	पाठ्यक्रम
1	जुलाई	ईकाई - 1	अंतर्राष्ट्रीय राजनीति का अर्थ, प्रकृति, क्षेत्र
2	अगस्त	ईकाई - 1	अंतर्राष्ट्रीय राजनीति के अध्ययन के उपागम
3	सितम्बर	ईकाई - 2	अंतर्राष्ट्रीय राजनीति के विभिन्न सिद्धांत - शक्ति, परिभाषा, तत्व
4	अक्टूबर	ईकाई - 2	अंतर्राष्ट्रीय राजनीति के विभिन्न सिद्धांत - शक्ति संघर्ष, शक्ति संचय, शक्ति वृद्धि
5	नवम्बर	ईकाई - 3	शक्ति संतुलन की अवधारणा, - सैद्धांतिक लाभ एवं मूल्यांकन, शांति एवं सुरक्षा की अवधारणा, - सामूहिक सुरक्षा सिद्धांत
6	दिसम्बर	ईकाई - 4	राजनय परिभाषा, प्रकार, कार्य उद्देश्य, एवं साधन, निःशस्त्रीकरण का अर्थ, परिभाषा, विकास एवं निःशस्त्रीकरण के मार्ग
7	जनवरी	ईकाई - 5	अंतर्राष्ट्रीय राजनीति के नये प्रतिमान
8	फरवरी	ईकाई - 5	पर्यावरण, वैश्विकरण, मानव अधिकार

2/11

राजनीति विज्ञान विभाग
शासकीय नेहरू स्नातकोत्तर महाविद्यालय
डोंगरगढ़, जिला राजनांदगाँव (छ.ग.)

टीचिंग प्लान - सत्र ...2023-24...

मा - एम.ए. तृतीय सेमेस्टर

प्रश्न पत्र - तृतीय - शोध प्रविधि भाग - एक

क्र	माह	ईकाई	पाठ्यक्रम
1	जुलाई	ईकाई - 1	सामाजिक शोध की प्रकृति, महत्व एवं उपयोग शुद्ध एवं व्यवहारिक शोध समस्या की पहचाना, शोध अभिकरण, उपकल्पना, का निर्माण
2	अगस्त	ईकाई - 2	सामाजिक सर्वेक्षण - उद्देश्य, महत्व, प्रक्रिया, तथ्य संकलन, की तकनीकी, तथ्यों के प्राथमिक एवं द्वितीय स्रोत
3	सितम्बर	ईकाई-3	अवलोकन पद्यति, अर्थ, परिभाषा, महत्व, कारण, प्रकार
4	अक्टूबर	ईकाई - 3	साक्षात्कार पद्यति, प्रश्नावली एवं अनुसूची
5	नवम्बर	ईकाई - 4	अध्ययन के विभिन्न प्रकार - पैनल स्टडी, केस स्टडी, क्षेत्रीय अध्ययन

टीचिंग प्लान - सत्र ...2023-24...

कक्षा - एम.ए. तृतीय सेमेस्टर

प्रश्न पत्र - चतुर्थ - लोक प्रशासन, भाग-एक

क्र	माह	ईकाई	पाठ्यक्रम
1	जुलाई	ईकाई - 1	छत्तीसगढ़ में राष्ट्रीय आंदोलन - 1855 से 1947 - असहयोग आंदोलन, सविनय अवज्ञा आंदोलन, और भारत छोड़ो आंदोलन
2	अगस्त	ईकाई-2	प्रमुख महापुरुष - गुरुदासीदास, पं. सुंदरलाल शर्मा, ठाकुर प्यारेलाल, डॉ. खुबचंद बघेल का योगदान
3	सितम्बर	ईकाई - 3	छत्तीसगढ़ राज्य निर्माण हेतु आंदोलन एवं राज्य निर्माण
4	अक्टूबर	ईकाई - 3	छत्तीसगढ़ में स्थानीय स्वशासन - ग्राम पंचायत, नगर पंचायत एवं नगर निगम का संगठन, कार्य अधिकार एवं स्थिति
5	नवम्बर	ईकाई - 4	छत्तीसगढ़ में जनजातीय क्षेत्रों का प्रशासन - संवैधानिक प्रावधान, पांचवीं अनुसूची के अंतर्गत प्रशासित क्षेत्र, बस्तर एवं सरगुजा विकास प्राधिकरण
			छत्तीसगढ़ की राजनीति के प्रमुख निर्धारक तत्व एवं विशेषताएं
			छत्तीसगढ़ में जिला प्रशासन एवं जिलाधीश की भूमिका
			छत्तीसगढ़ में विकास प्रशासन - जिला पंचायत सीईओ, कार्य अधिकार, एवं भूमिका, शासन की प्रमुख विकास योजनाएं

2/11

राजनीति विज्ञान विभाग
शासकीय जे.ए. स्नातकोत्तर महाविद्यालय
डोंगरगढ़, जिला राजनांदगाँव (छ.ग.)

टीचिंग प्लान - सत्र ...2023-24.....

कक्षा - एम.ए. चतुर्थ सेमेस्टर प्रश्न पत्र - प्रथम - अंतर्राष्ट्रीय राजनीति के समाकालीनतम मुद्दे

क्र	माह	ईकाई	पाठ्यक्रम
1	जनवरी	ईकाई - 1	अंतर्राष्ट्रीय राजनीति के असंलग्नता - आधार, भूमिका, महत्व एवं प्रासंगिकता
2	फरवरी	ईकाई - 2	शीतयुद्ध एवं शीतयुद्ध की समाप्ति - कारण, परिणाम, नई विश्व व्यवस्था
3	मार्च	ईकाई - 3	उत्तर शीतयुद्ध कालीन महत्वपूर्ण मुद्दे, वैश्वीकरण, मानवाधिकार, पर्यावरण, आंतकवाद
4	अप्रैल	ईकाई - 4	प्रमुख राष्ट्रों की विदेश नीतियां, भारत, संयुक्त राज्य अमेरिका, चीन, रूस

टीचिंग प्लान - सत्र ...2023-24.....

कक्षा - एम.ए. चतुर्थ सेमेस्टर प्रश्न पत्र - द्वितीय - लोक प्रशासन भाग दो

क्र	माह	ईकाई	पाठ्यक्रम
1	जनवरी	ईकाई - 1	कार्मिक समस्या, निवारण व्यवस्था, भारतीय प्रशासन के विशेष संदर्भ में
2	फरवरी	ईकाई - 2	वित्तीय प्रशासन - अर्थ, प्रकृति, विशेषताएं, बजट - सिद्धांत व महत्व, भारत में बजट निर्माण प्रक्रिया, कार्यपालिका एवं न्यायपालिका का प्रशासन पर नियंत्रण
3	मार्च	ईकाई - 3	प्रशासनिक व्यवहार - नेतृत्व, निर्णय, संचार, जवाबदेहिता
4	अप्रैल	ईकाई - 4	लोक प्रशासन में भ्रष्टाचार, आम्बुड्समैन, लोकपाल, लोकायुक्त प्रशासन में स्थानीय स्वायत्तशासी संस्थाओं की भूमिका

2/4

हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

एम.ए. प्रथम सेमेस्टर इतिहास (M.A. I Sem. History)

प्रथम-प्रश्न पत्र (अनिवार्य) (I Paper Compulsory)

इतिहास पद्धति (Methodology of History)

इकाई- 1

1. इतिहास का अर्थ एवं परिभाषा
2. इतिहास का स्वरूप
3. इतिहास विज्ञान एवं कला के रूप में
4. इतिहास के प्रकार एवं क्षेत्र विस्तार

इकाई- 2

5. इतिहास का अन्य सभी सामाजिक विज्ञान विषयों के साथ संबंध -- राजनीति शास्त्र, समाजशास्त्र, अर्थशास्त्र, मानवशास्त्र, भूगोल एवं पुरातत्व

6. इतिहास का साहित्य के साथ संबंध
7. इतिहास में तथ्य
8. तथ्यों की व्याख्या

इकाई- 3

9. इतिहास में उपकरण
10. इतिहास में कारण, कार्य-कारण संबंध

11. इतिहास में वस्तुनिष्ठता
12. इतिहास में पूर्वाग्रह

इकाई- 4

13. इतिहास का चक्रवादी सिद्धांत

14. इतिहास का समाज शास्त्रीय सिद्धांत

15. इतिहास का आदर्शवादी सिद्धांत

16. इतिहास का तुलनात्मक सिद्धांत

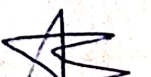
इकाई- 5

17. इतिहास का आलोचनात्मक सिद्धांत

18. इतिहास का भौतिकवादी सिद्धांत

19. इतिहास का प्रत्यक्षवाद

20. इतिहासवाद



हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

एम.ए. प्रथम सेमेस्टर इतिहास (M.A. I Sem. History)

द्वितीय-प्रश्न पत्र (अनिवार्य) (II Paper Compulsory)

आधुनिक विश्व (Modern World)

1
विश्व में पूंजीवाद का विकास
साम्राज्यवाद का विकास—इंग्लैंड और फ्रांस में
साम्राज्यवाद का विकास—जर्मनी और जापान में
इंग्लैंड में उदारवाद का विकास

2
5. बिस्मार्क की आंतरिक एवं विदेश नीति
6. कैसर विलियम द्वितीय की विश्व राजनीति
7. 1900-1910 तक अंतर्राष्ट्रीय संधियां
8. 1912 तक पूर्वी समस्या

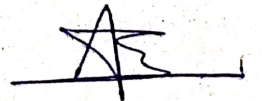
ईकाई- 3
9. प्रथम एवं द्वितीय बाल्कन युद्ध—कारण एवं प्रभाव
10. प्रथम विश्वयुद्ध कारण एवं परिणाम
11. पेरिस शांति सम्मेलन एवं वर्साय की संधि
12. विश्व में समाजवाद का विकास

ईकाई- 4
13. 1917 की रूसी क्रांति—कारण एवं परिणाम
14. बोल्शेविक क्रांति एवं लेनिन
15. राष्ट्रसंघ संगठन

16. राष्ट्रसंघ की उपलब्धियां एवं असफलताएं

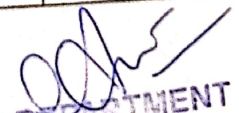
ईकाई- 5

17. प्रथम विश्वयुद्ध के पश्चात् विश्व आर्थिक मंदी का उदय
18. न्यूडील
19. इटली में फांसीवाद—उदय के कारण
20. मुसोलिनी—गृह एवं विदेश नीति



Months	B. Sc. I	B. Sc. II	B.Sc. III	M.Sc. I & II Sem
July	PAPER-I UNIT-I VIRUSES: General characteristics, types of viruses based on structure and genetic material.	PAPER-I, UNIT-IV Plant Anatomy: Root and shoot apical meristems theories of root and shoot apex organization, Permanent tissues, anatomy of root, stem and leaf of dicot and monocot.	PAPER-II, UNIT-I Cell and cell organelles, organization and morphology of chromosomes, giant Chromosomes, cell division, Mendel's laws, gene interactions, linkage and crossing over, Chromosomal aberration, polyploidy, sex linked inheritance, sex determination, cytoplasmic Inheritance, gene concept: cistron muton, recon.	CYTOLOGY UNIT-I
Aug	PAPER-I UNIT-I Multiplication of viruses (General account), Lytic and Lysogenic cycle. Economic importance. Structure and multiplication of Bacteriophages. General account of Viroids, Virusoids, Prions, And Cyanophages. Mycorrhiza-Types and Significance.	PAPER-II, UNIT-III Plant water relations: Diffusion, permeability, osmosis, imbibitions, plasmolysis, osmotic Potential and water potential, Types of soil water	PAPER-I, UNIT-I Incubator, Autoclave, Centrifuge, Spectrophotometere, Structure, Principle and applications of analytical instrumentation. Chromatography technique, Oven	CYTOLOGY UNIT-II GENETICS UNIT-I
Septem ber	PAPER-II, UNIT -I BRYOPHYTA: General characteristics, affinities, range of thallus organization, general classification and economic & ecological importance, Systematic position, occurrence, morphology anatomy and reproductive structure in Riccia, Marchantia, Pellia, Anthoceros, Funaria. Vegetative reproduction in Bryophytes, Evolution of sporophytes.	PAPER-I, UNIT-V Embryology: Flower as a reproductive organ, anther, microsporogenesis, types of ovules, Megasporogenesis, development of male and female gametophyte, pollination, mechanisms, self Incompatibility, fertilization, endosperm, embryo, polyembryonoy, apomixes and parthenocarpy.	PAPER-II, UNIT- II Nucleic acids, Structure and forms of DNA and RNA, DNA/RNA as genetic material, Replication of DNA, biochemical and molecular basis of mutation, genetic code and its Properties, mechanism of transcription and translation in prokaryotes, regulation of gene Expression, Operon model.	CYTOLOGY UNIT-III GENETICS UNIT-II
October	PAPER-II, UNIT-II PTERIDOPHYTES: General characteristics, affinities, economic importance and classification, Heterospory and seed habit, stellar system in Pteridophytes, Aposory and apogamy, Telome	PAPER-I UNIT-IV secondary growth in Root and stem, Anatomical anomalies in the primary structure of stems (Nyctanthes, Boerhaavia, Casuarina), Anamolous secondary growth in Dracaena, Bignonia, Laptadenia.	PAPER-II, UNIT- III Recombinant DNA, Enzymes in recombinant DNA technology, cloning vectors (Plasmid, Bacteriophages, Cosmids, Phagemids), gene cloning, PCR, Application of Biotechnology; G.M.Plants, Monoclonal antibodies, DNA finger	CYTOLOGY UNIT-IV GENETICS UNIT-III

	theory, Azolla as Biofertilizer.		printing	
Nov	PAPER-I, UNIT-III FUNGI: General account of habit and habitat, structure (range of thallus organization), cell wall composition, nutrition and reproduction in fungi. Heterothallism and Parasexuality. Outlines of Classification of fungi. Economic importance of fungi.	PAPER-II, UNIT-III water holding capacity, wilting, Absorption of Water, theories of Ascent of sap, Mineral nutrition and absorption, Deficiency symptoms, Transpiration, stomatal movement, significance of transpiration, Factors affecting transpiration, Guttation	PAPER-II, UNIT-IV Protein: Chemical composition, primary, secondary and tertiary structure of Proteins. Carbohydrate: general account of monosaccharides, disaccharids and Polysaccharides	GENETICS UNIT-IV
Dec	Life cycles of Saprolegnia, Albugo, Aspergillus, Peziza, Agaricus, Ustilago, Puccinia, Alternaria and Cercospora. VAM Fungi	PAPER-II, UNIT-IV Photosynthesis: Photosynthetic apparatus and pigments, light reaction mechanism of ATP Synthesis. C3, C4 CAM pathway of carbon reduction, photorespiration, factors affecting Photosynthesis.	PAPER-II, UNIT-IV Fat: Structure and properties of fats and fatty acids, synthesis and breakdown.	
January	PAPER-II, UNIT-IV Gymnosperm: General characteristics, affinities, economic importance and classification, Morphology, anatomy and reproduction in Cycas, Pinus and Ephedra.	Respiration: Aerobic and anaerobic respiration, Glycolysis, Krebs' cycle, factors affecting, Respiration, R.Q.	PAPER-II, UNIT- V ENZYMES: Nomenclature and classification, components of enzymes, theories of enzyme Action,	MOLECULAR BIOLOGY UNIT-I PLANT PHYSIOLOGY UNIT-I
February	PAPER-I, Revision PAPER-II Revision	PAPER-II, UNIT-V Plant growth hormones: Auxin, Gibberellin, Cytokinin, Ethylene and Abscissic acid. Physiology Of flowering, Florigen concept, Photoperiodism and Vernalization. Seed dormancy and Germination, plant movement.	PAPER-I, UNIT-II Plant Tissue culture techniques, growth media, totipotency, protoplast culture, somatic Hybrids and cybrids, micropropagation, somaclonal variations, haploid culture. Analytical techniques: Microscopy-Light microscope, Electron microscope	MOLECULAR BIOLOGY UNIT-II PLANT PHYSIOLOGY UNIT-II
March				MOLECULAR BIOLOGY UNIT-III PLANT METABOLISM UNIT-I
April				MOLECULAR BIOLOGY UNIT-IV PLANT METABOLISM UNIT-III


 HEAD DEPARTMENT
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 Dongargarh, Dist. Rajnandgaon

DEPARTMENT OF PHYSICS
TEACHING PLAN 2023-24

CLASS- B.SC PART-III

PAPER-II SOLID STATE PHYSICS, SOLID STATE DEVICES AND ELECTRONICS

Sr. No.	Month	Proposed Work
01.	July	<p align="center">Unit-I</p> Amorphous and crystalline solids, Elements of symmetry, seven crystal system, Cubic lattices, Crystal planes, Miller indices,
02.	August	Laue's equation for X-ray diffraction, Bragg's Law, Bonding in solids, classification. Cohesive energy of solid, Madelung constant, evaluation of Parameters, Specific heat of solids, classical theory (Dulong-Petit's law), Einstein and Debye theories, Vibrational modes of one dimensional monoatomic lattice, Dispersion relation, Brillouin Zone. <p align="center">Unit-II</p> Free electron model of a metal, Solution of one dimensional Schrodinger equation in a constant potential,
03.	September	Density of states, Fermi Energy, Energy bands in a solid (Kronig- Penny model without mathematical details), Difference between Metals, Insulator and Semiconductors, Hall effect, Dia, Para and Ferromagnetism, Langevin's theory of dia and para-magnetism, Curie- Weiss's Law, Qualitative description of Ferromagnetism (Magnetic domains), B-H curve and Hysteresis loss.
04.	October	<p align="center">Unit-II</p> Free electron model of a metal, Solution of one dimensional Schrodinger equation in a constant potential, Density of states, Fermi Energy, Energy bands in a solid (Kronig-Penny model without mathematical details), Difference between Metals, Insulator and Semiconductors, Hall effect, Dia, Para and Ferromagnetism, Langevin's theory of dia and para-magnetism, Curie- Weiss's Law, Qualitative description of Ferromagnetism (Magnetic domains), B-H curve and Hysteresis loss.
05.	November	<p align="center">Unit-III</p> Intrinsic and extrinsic semiconductors, Concept of Fermi level, Generation and recombination of electron hole pairs in semiconductors, Mobility of electrons and holes, drift and diffusion currents, p-n junction diode, depletion width and potential barrier, junction capacitance, I-V characteristics, Tunnel diode, Zener diode, Light emitting diode, solar cell, Bipolar transistors, pnp and npn transistors, characteristics of transistors, different configurations, current amplification factor, FET and MOSFET Characteristics.
06.	December	<p align="center">Unit-IV</p> Half and full wave rectifier, rectifier efficiency ripple factor, Bridge rectifier, Filters, Inductor filter, L and z section filters, Zener diode, regulated power supply using zener diode, Applications of transistors, Bipolar Transistor as amplifier, h-parameter, h-parameter equivalent circuit, Transistor as power amplifier, Transistor as oscillator, principle of an oscillator and Bark Hausen's condition, requirements of an oscillator, Wein-Bridge oscillator and Hartley oscillator.

January	<p style="text-align: center;">Unit-V</p> <p>Digital Circuits: Difference between Analog and Digital Circuits, Binary Numbers, Decimal to Binary and Binary to Decimal Conversion, AND, OR and NOT Gates (Realization using Diodes and Transistor), NAND and NOR Gates as Universal Gates, XOR and XNOR Gate, De Morgan's Theorems, Boolean Laws, Simplification of Logic Circuit using Boolean Algebra, Digital to Analog Converter, Analog to Digital Converter.</p>
February	Practical and Revision

Rohan

HEAD DEPT. OF PHYSICS
GOVT. NEHRU P.G. COLLEGE
DONGARGARH (C.G.)

Rohan

[Signature]
~~26/7/2023~~

Principal,
Govt. Nehru P.G. College
DONGARGARH
Distt. Rajnandgaon (C.G.)

DEPARTMENT OF PHYSICS
TEACHING PLAN 2023-24

CLASS- B.SC PART-I

PAPER-II ELECTRICITY, MAGNETISM AND ELECTROMAGNETIC THEORY

Sr. No.	Month	Proposed Work
01.	July	Unit-I Repeated integrals of a function of more than one variable, definition of a double and triple integral. Gradient of a scalar field and its geometrical interpretation,
02.	August	divergence and curl of a vector field, and their geometrical interpretation, line, surface and volume integrals, flux of a vector field. Gauss's divergence theorem, Green's theorem and Stoke's theorem and their physical significance. Kirchoff's law, Ideal Constant-voltage and Constant-current Sources. Thevenin theorem, Norton theorem, Superposition theorem, Reciprocity theorem and Maximum Power Transfer theorem. Unit-II Coulomb's law in vacuum expressed in -Vector forms, calculations of E for simple distributions of charges at rest, dipole and quadrupole fields
03.	September	Work done on a charge in an electrostatic field expressed as a line integral, conservative nature of the electrostatic field. Relation between Electric potential and Electric field, torque on a dipole in a uniform electric field and its energy, flux of the electric field. Gauss's law and its application: E due to (1) an Infinite Line of Charge, (2) a Charged Cylindrical Conductor, (3) an Infinite Sheet of Charge and Two Parallel Charged Sheets, capacitors, electrostatic field energy; force per unit area of the surface of a conductor in an electric field, conducting sphere in a uniform electric field.
04.	October	Unit-III Dielectric constant, Polar and Non Polar dielectrics, Dielectrics and Gauss's Law, Dielectric Polarization, Electric Polarization vector P, Electric displacement vector D. Relation between three electric vectors, Dielectric susceptibility and permittivity, Polarizability and mechanism of Polarization, Lorentz local field, Clausius Mossotti equation, Debye equation, Ferroelectric and Paraelectric dielectrics, Steady current, current density J, non-steady currents and continuity equation, rise and decay of current in LR, CR and LCR circuits,
05.	November	decay constants, AC circuits, complex numbers and their applications in solving AC circuit problems, complex impedance and reactance, series and parallel resonance, Q factor, power consumed by an AC circuit, power factor. Unit-IV Magnetization Current and magnetization vector M, three magnetic vectors and their relationship, Magnetic permeability and susceptibility, Diamagnetic,
06.	December	paramagnetic and ferromagnetic substances. B.H. Curve, cycle of magnetization and hysteresis, Hysteresis loss. Biot-Savart's Law and its applications: B due to (1) a Straight Current Carrying Conductor and (2) Current Loop. Current Loop as a Magnetic Dipole and its Dipole Moment (Analogy with Electric Dipole). Ampere's Circuital law (Integral and

	Differential Forms).
January	<p style="text-align: center;">Unit-V</p> <p>Electromagnetic induction, Faraday's law, electromotive force, integral and differential forms of Faraday's law Mutual and self inductance, Transformers, energy in a static magnetic field. Maxwell's displacement current, Maxwell's equations, electromagnetic field energy density. The wave equation satisfied by E and B, plane electromagnetic waves in vacuum, Poynting's vector.</p>
February	Practical and Revision

Rohan

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GOVT. NEHRU P.G. COLLEGE
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26/7/2023

Principal,
Govt. Nehru P.G. College
DONGARGARH
Distt. Rajnandgaon (C.G.)


DEPARTMENT OF PHYSICS
TEACHING PLAN 2023-24

CLASS- M.Sc. Semester-IV
PAPER-I: NUCLEAR AND PARTICLE PHYSICS

Sr. No.	Month	Proposed Work
01.	January	<p align="center">Unit-I</p> <p>Nuclear Interactions: Nucleon-nucleon interaction, Two-nucleon system, The ground state of the deuteron, Tensor forces, Nucleon-nucleon scattering at low energy, Scattering length, Effective range theory, Spin dependence of nuclear forces, Charge independence and charge symmetry of nuclear forces, Iso-spin formalism, Exchange forces, Meson theory of nuclear forces and the Yukawa interaction.</p>
02.	February	<p align="center">Unit-II</p> <p>Nuclear Reactions: Reaction energetics: Q-equation and threshold energies, Reactions cross sections, Resonance: Breit-Wigner single-level formula, Direct and compound nuclear reactions, Formal reaction theory: Partial wave approach and phase shifts, Scattering matrix, Reciprocity theorem,</p>
03.	March	<p align="center">Unit-III</p> <p>Nuclear Decay: Beta decay, Femi's theory of beta decay, Shape of the beta spectrum, Total decay rate, Angular momentum and parity selection rules, Comparative half-lives, Allowed and forbidden transitions, Selection rules, Parity violation, Two component theory of neutrino decay, Detection and properties of neutrino</p> <p>Gamma decay, multiple transitions in nuclei, Angular momentum and Parity selection rules, internal conversion, nuclear isomerism</p>
04.	April	<p align="center">Unit-IV</p> <p>Nuclear models: Liquid drop model, Bohr-Wheeler theory of fission, Shell Model, Experimental evidence for shell effects, Single particle shell model, Spin-orbit interaction and magic numbers, Analysis of shell model predictions, Magnetic moments and Schmidt lines, Collective model of Bohr and Mottelson.</p> <p align="center">Unit-V</p> <p>Elementary particle Physics: The fundamental interactions, Classification of elementary particles, Leptons and Hadrons, Symmetries, groups and conservation laws, SU(2) and SU(3) multiples and their properties, Quark model, Properties of Quarks, the standard model.</p>
05.	May	EXAMS

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DEPARTMENT OF PHYSICS
TEACHING PLAN 2023-24

CLASS- M.Sc. Semester-IV
PAPER-II: LASER PHYSICS AND APPLICATIONS

Sr. No.	Month	Proposed Work
01.	January	<p align="center">Unit-I</p> <p>Laser Characteristics- Spontaneous and stimulated emission, Einstein's quantum theory of radiation, theory of some optical processes, coherence and monochromaticity, kinetics of optical absorption, line broadening mechanism, Basic principle of lasers, population inversion, laser pumping, two & three level laser systems, resonator, Q-factor, losses in cavity, threshold condition, quantum yield.</p>
02.	February	<p align="center">Unit-II</p> <p>Laser Systems Solid state lasers- the ruby laser, Nd: YAG laser, ND: Glass laser, semiconductor lasers – features of semiconductor lasers, intrinsic semiconductor lasers, Gas laser - neutral atom gas laser, He-Ne laser, molecular gas lasers, CO2 laser, Liquid lasers, dye lasers and chemical laser.</p> <p align="center">Unit-III</p> <p>Advances in laser Physics- Production of giant pulse -Q-switching, giant pulse dynamics, laser amplifiers, mode locking and pulling, Non-linear optics, Harmonic generation,</p>
03.	March	<p>,second harmonic generation, Phase matching, third harmonic generation, optical mixing, parametric generation and self-focusing of light.</p> <p align="center">Unit-IV</p> <p>Multi-photon processes; multi-quantum photoelectric effect, Theory of two-photon process, three- photon process, second harmonic generation, parametric generation of light, Laser spectroscopy: Rayleigh and Raman scattering, Stimulated Raman effect, Hyper-Raman effect, Coherent anti-stokes Raman Scattering, Photo-acoustic Raman spectroscopy</p>
04.	April	<p align="center">Unit-V</p> <p>Laser Applications – ether drift and absolute rotation of the Earth, isotope separation, plasma, thermonuclear fusion, laser applications in chemistry, biology, astronomy, engineering and medicine. Communication by lasers: ranging, fiber Optics Communication, Optical fiber, numerical aperture, propagation of light in a medium with variable index, pulse dispersion.</p>
05.	May	EXAMS

Principal, 26/7/2023

CLASS- M.Sc. Semester-IV
PAPER-III: SOLID STATE PHYSICS- II

Sr. No.	Month	Proposed Work
01.	January	<p style="text-align: center;">Unit-I</p> <p>Plasmon's, Polaritons Dielectric function of the electron gas, Plasma optics, Dispersion relation for EM wave, Transverse optical modes in Plasma, Transparency of Alkali metals in the ultraviolet, Longitudinal Plasma oscillations, Plasmon, electrostatic screening and screened Coulomb potential, Mott metal-insulator transition, screening and phonons in metals, Polaritons, LST relation.</p>
02.	February	<p style="text-align: center;">Unit-II</p> <p>Dielectric and ferroelectrics Maxwell's equations, polarization, macroscopic electric field, depolarization field, E₁; local electric field at an atom, Lorentz field E₂, fields of dipoles inside cavity E₃; dielectric constant and polarizability, electronic polarizability; structural phase transition; ferro-electric crystals, classification; displacive transition, soft optical phonons, Landau theory of phase transitions, first and second order transition, antiferro-electricity, ferro- electric domain, piezoelectricity, ferro-elasticity, optical ceramics.</p>
03.	March	<p style="text-align: center;">Unit-III</p> <p>Magnetism General ideas of dia- and para- magnetisms, quantum theory of paramagnetism, rare earth ions, Hund rule, iron group ions, crystal field splitting, quenching of orbital angular momentum, spectroscopic splitting factor, nuclear demagnetization, paramagnetic Susceptibility of conduction electrons.</p> <p style="text-align: center;">Unit-IV</p> <p>Ferromagnetism and anti-ferromagnetism Ferromagnetic order, Curie point and exchange integral, temp dependence of saturation magnetization, saturation magnetization at absolute zero; magnons. Ferrimagnetic order, Curie temp and susceptibility of ferrimagnets, iron garnets. Antiferromagnetic order,</p>
04.	April	<p style="text-align: center;">Unit-V</p> <p>Optical Processes & Excitons and defects Optical reflectance, excitons, Frenkel and Mott-Wannier excitons, Alkali Halides and Molecular crystals Defects: lattice vacancies, Schottky and Frenkel point effects, colour centers, F and other centers, Line defect. Shear strength of single crystals, dislocations- edge and screw dislocations, Burger vectors, Stress fields of dislocations, low angle grain boundaries,</p>
05.	May	<p>dislocation densities, dislocation multiplication and slip, strength of alloys, dislocations and crystal growth, hardness of materials.</p>

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S. Thakur

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Distt. Rajnandgaon (C.G.)

DEPARTMENT OF PHYSICS
TEACHING PLAN 2023-24

CLASS- M.Sc. Semester-II
PAPER-I: QUANTUM MECHANICS-I

Month	Proposed Work
January	Unit-I Inadequacy of classical mechanics, Planck's quantum hypothesis and radiation law, Photoelectric effect, De-Broglie's theory. Schrödinger equation, continuity equation, Ehrenfest theorem, admissible wave functions, stationary states, one-dimensional problems; potential well and barriers, Schrödinger equation for harmonic oscillator and its solution, uncertainty relations, states with minimum uncertainty product.
February	Unit-II Superposition principle, general formalism of wave mechanics, representation of states and dynamical variables, commutation relationship, completeness and normalization of Eigen functions, Dirac-delta function, Bra & Ket notation, matrix representation of an operator, harmonic oscillator and its solution by matrix method, Heisenberg equation of motion.
March	Unit-III Angular momentum in quantum mechanics, commutation relationships, Eigen values, Spin angular momentum, Pauli's matrices, addition of angular momentum, Clebsch-Gordan coefficients. Unit-IV Central force problem, spherically symmetric potentials in three dimensions, separation of wave equation, parity, three-dimensional square-well potential and energy levels, the hydrogen atom;
04. April	solution of the radial equation, energy levels and stationary state wave functions, discussion of bound states, degeneracy. Unit-V Time-independent perturbation theory, non-degenerate case, first order and second perturbations with the example of an oscillator, degenerate cases, removal of degeneracy in second order, Zeeman effect without electron spin, first-order Stark effect in hydrogen,
05. May	perturbed energy levels, correct Eigen function, occurrence of permanent electric dipole moments.

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Dist. Bargarh

Department of Zoology
Teaching Plan- 2023-24
Department of Zoology
B.Sc. I Year

Month	Unit	PAPER- I - Cell Biology and Non-chordata	PAPER- II - Chordata and Embryology
July 2023	Unit - I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear Plasma membrane, Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome). 3. Nucleus, Chromosomes, DNA and RNA.	1. Classification of Hemichordata 2. Hemichordata- Type study-Balanoglossus 3. Classification of Chordates upto orders.. 4. Protochordata-Type study - Amphioxus. 5. A comparative account of Petromyzon and Myxine.
August 2023	Unit - II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of Immunity: Innate & Acquired Immunity, Lymphoid organs, Cells of Immune System, Antigen, antibody and their interactions.	1. Fishes-Skin & Scales, migration in fishes, Parental care in fish. 2. Amphibia-Parental care and Neoteny. 3. Reptilia- Poisonous & Non-poisonous Snakes, Poison apparatus, snake venom and Extinct Reptiles
September 2023	Unit - III	• General characters and classification of Phylum Protozoa, Porifera, and Coelenterata up to order. 2. Protozoa: Type study - Paramecium, 2. Porifera: Type study - Sycon. 3. Coelenterata: Type study - Obelia. Practical work start.	1. Birds- Flight Adaptation, Migration, and Perching mechanism, Discuss-Birds are glorified reptiles. 2. Mammals- Comparative account of Prototheria, Metatheria, Eutheria and Affinities. 3. Aquatic Mammals and their adaptations. Practical work start.
October 2023	Unit - IV	• General characters and classification of Phylum Platyhelminthes, Nematelminthes, Annelida and Arthropoda up to order. 2. Platyhelminthes and Nematelminthes: Type Study - Fasciola, Ascaris 3. Annelida: Type Study - Pheretima. 4. Arthropoda: Type Study - Palaemone.	1. Fertilization 2. Gametogenesis, Structure of gamete and Types of eggs 3. Cleavage 4. Development of Frog up to formation of three germ layers. 5. Parthenogenesis
November 2023	Unit-V	• General characters and classification of Phylum Mollusca and Echinodermata up to order. 2. Mollusca: Type Study - Pila. 3. Echinodermata- Type Study- Asterias (Starfish).	1. Embryonic induction, Differentiation and Regeneration. 2. Development of Chick (a) up to formation of three germ layers, (2) Extra-embryonic membranes. 3. Placenta in mammals.
December 2023 & January 2024	Unit revised/ Internal Exam		
February 2024	Practical Exam		
March 2024	Annual Exam		

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Department of Mathematics

Teaching Plan 2023-24

B.Sc. Mathematics Part I

LEELARAM DEWAMGAN

S.No.	Month	Paper	
1.	July	Paper I	UNIT-1 Symmetric, Skew symmetric, Hermitian and skew hermitian, matrices. Elementary operations on matrices, Inverse of a matrix. Linear independence of row and column matrices, Row rank, Column rank and rank of a matrix. Equivalence of column and row ranks. Eigen values, Eigen vectors and the characteristic equations of a matrix. Cayley Hamilton theorem and its use in finding inverse of a matrix.
2.	August	Paper I	UNIT-2 Application of Matrices to a system of linear (both homogeneous and nonhomogeneous) equations. Theorems consistency of a system of linear equations. Relation between the roots and coefficients of general polynomial equations in one variable. Transformation of equations. Descartes's rule of signs. Solutions of cubic equations (Cardan's Method), Biquadratic equation.
3.	September	Paper I	UNIT-3 Mappings, Equivalence relations and partitions. Congruence modulo n . Definition of a group with examples and simple properties. Cyclic groups generators, Coset decomposition, Lagrange's theorem and its consequences. Fermat and Euler's theorems. Normal subgroups. Quotient group, Permutation groups, Even and odd permutations the alternating groups. Cayley's theorem A_n .
4.	October	Paper II	UNIT-1 $\epsilon - \delta$ definition of the limit of a function. Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability. Successive differentiation. Leibniz theorem. Maclaurin and Taylor series expansions.
5.	November	Paper II	UNIT-2 Asymptotes curvature. Tests for concavity and convexity. Points of inflexion. Multiple points. Tracing of curves in Cartesian and polar coordinates.
6.	December	Paper I	UNIT-4 Homomorphism and Isomorphism the fundamental theorems of homomorphism. Introduction, properties and examples of Rings, Subrings, Integral domain and fields Characteristic of a ring and field.
7.	January	Paper I	UNIT-5 De Moivre's theorem and its applications. Direct and inverse Circular and Hyperbolic functions. Logarithm of a complex quantity. Expansion of Trigonometrical functions. Gregory's series. Summation of series.
8.	February	Paper II	UNIT-3 Integration of irrational algebraic functions and transcendental functions. Reduction formulae. Definite integrals. Quadrature. Rectification. Volumes and surfaces of solids of revolution.

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Govt. Nehru P.G. College, Dongargarh

Department of Mathematics

Teaching Plan 2023-24

B.Sc. Mathematics Part-I

MS. PRIYA THAKUR

No.	Month	Paper	Content
1.	July August	Paper III	UNIT-1 Scalar and vector product of three vectors. Product of four vectors. Reciprocal Vectors. Vector differentiation. Gradient, divergence and curl.
2.	September	Paper III	UNIT-2 Vector integration. Theorems of Gauss, Green, Stokes and problems based on these.
3.	October	Paper III	UNIT-3 General equation of second degree. Tracing of conics. System of conics. Confocal conics. Polar equation of a conic.
4.	November	Paper II	UNIT-4 Degree an order of a differential equation. Equations of first order and first degree. Equations in which the variables are separable. Homogeneous equations. Linear differential equations. Equations reducible to the linear form. Exact solutions. Clairaut's form and singular solutions. Geometrical meaning of a differential equation. Orthogonal trajectories. Linear differential equations with constant coefficients. Homogeneous linear ordinary differential equations.
5.	December	Paper II	UNIT-5 Linear differential equations of second order. Transformation of the equation by changing the dependent variable/the independent variable. Method of variation of parameters. Ordinary simultaneous differential equations.
6.	January	Paper III	UNIT-4 Plane the Straight line and the plane. Sphere cone. Cylinder.
7.	February	Paper III	UNIT-5 Central Conicoids. Paraboloids. Plane sections of conicoids. Generating lines. Confocal Conicoids. Reduction of second degree equations.

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Teaching Plan- 2023-24

Department of Zoology

M.Sc.- I Semester

Month	Unit	PAPER- I - BIOSYSTEMATICS, TAXONOMY AND BIODIVERSITY	PAPER- II - STRUCTURE & FUNCTION OF INVERTEBRATES
July 2023	Unit - I	<p>Definition and basic concepts of biosystematics and taxonomy.</p> <p>Historical resume of systematics.</p> <p>Importance and applications of biosystematics in biology</p> <p>Trends in biosystematics concepts of different conventional and newer aspects</p> <p>Chemotaxonomy</p> <p>Cytotaxonomy</p> <p>Molecular taxonomy</p>	<p>Organization of coelom</p> <p>Acoelomates and Pseudocoelomates</p> <p>Coelomates: Protostomia and Deuterostomia.</p> <p>Locomotion</p> <p>Flagellar and cilliary movement in Protozoa.</p> <p>Hydrostatic movement in Coelenterata, Annelida and Echinodermata.</p>
August 2023	Unit - II	<p>Dimensions of speciation and taxonomic characters</p> <p>Mechanisms of speciation in panmictic and apomictic species</p> <p>Species concepts and species category.</p> <p>Theories of biological classification.</p> <p>Taxonomic characters and different kinds.</p>	<p>Nutrition and Digestion</p> <p>Patterns of feeding and digestion in Protozoa</p> <p>Filter feeding in polychaeta.</p> <p>Respiration</p> <p>Organs of respiration Gills, lungs and trachea.</p> <p>Respiratory pigments.</p>
September 2023	Unit - III	<p>Procedure keys in taxonomy.</p> <p>Taxonomic procedures-taxonomic collections, preservation, curation</p> <p>Taxonomic keys-different kinds of taxonomic keys, their merits and demerits.</p> <p>Process of typification and different Zoological types.</p> <p>International code of Zoological Nomenclature (ICZN)</p>	<p>Excretion Organs of excretion.</p> <p>Excretion and osmoregulation</p> <p>Nervous System</p> <p>Primitive nervous system:</p> <p>Coelenterata and Echinodermata.</p> <p>Advanced Nervous system: Annelida, Arthropoda (Crustacea and insecta) and Mollusca (Cephalopoda)</p>
October 2023	Unit - IV	<p>Biodiversity</p> <p>Types of Biodiversity</p> <p>Hot spots of Biodiversity</p> <p>Threats to Biodiversity</p> <p>Conservation of Biodiversity</p> <p>Evaluation of biodiversity indices</p>	<p>Invertebrate larvae</p> <p>Larval forms of free-living and parasitic invertebrates</p> <p>Minor Phyla</p> <p>Organization and general characters of (Ctenophore, Rotifera, Ectoprocta, Endoprocta)</p>
November 2023	Unit-V	Practical complete and Unit Revised	Practical complete and Unit Revised
December 2023	Semester Exam		

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Teaching Plan- 2023-24

Department of Zoology

M.Sc. - I Semester

Month	Unit	PAPER- III - POPULATION GENETICS & EVOLUTION	PAPER- IV- TOOLS & TECHNIQUES IN BIOLOGY
July 2023	Unit - I	Concepts of evolution and theories of organic evolution: Lamarckism, Darwinism and Synthetic theory of evolution Evidences of evolution: anatomical, embryological, palaeontological, physiological and Bio-chemical	Principles and application of Ultracentrifugation Electrophoresis Chromatography (various types) Lambert-Beers Law and colorimetry and spectrophotometry Flow cytometry .
August 2023	Unit - II	Hardy-Weinberg law of genetic equilibrium Detailed account of destabilizing forces. Natural selection Mutation Genetic drift Meiotic drive Phenotypic variation	Principles and Application of Light Microscopy and micrometry Phase Contrast microscopy Interference microscopy Fluorescence microscopy Transmission Electron microscopy. Scanning Electron microscopy.
September 2023	Unit - III	Patterns and mechanisms of reproductive isolation Phylogenetic and biological concepts of species Gene Evolution, Evolution of gene families Factors affecting human disease frequency	Assay Chemical assays Biological assays-in vivo and in vitro Principles of cytological and cytochemical techniques Fixation: chemical basis of fixation by formaldehyde, gluteraldehyde, chromium salts, mercury salts, osmium salts, alcohol and acetone Chemical basis of staining of carbohydrate, protein lipids and nucleic acids.
October 2023	Unit - IV	Origin of higher categories Micro-and Macro-evolution Evolution of horse, elephant, camel, man	Principle and techniques of Nucleic acid hybridization and cot curve Sequencing of proteins and nucleic acids Freeze techniques Media preparation and
November 2023	Unit-V	Practical complete and Unit Revised	Practical complete and Unit Revised
December 2023	Semester Exam		

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