GOVERNMENT COLLEGE HANSI

Lesson Plan for Odd Semester 2022-23

Department of Commerce

Name of Teacher: **Shiv Kumar** Class: **M.Com. (F) Sem. - 3**

Subject: **Personal Finance** Paper: **OE - 303**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Personal Finance: Meaning and importance. Financial planning: meaning, process and role of financial planner. Risk profiling: client data analysis, life cycle, wealth cycle. Asset allocation: Strategic, Tactical, Fixed and Flexible.	3 Weeks	Project cum Test 2nd Week of October
Unit-2	Risk Management: Meaning, process and importance. Distinguish between risk assessment, risk management and risk avoidance. Assessment of requirement of Health Insurance, Life Insurance and General Insurance. Choice of products for risk coverage.	2 Weeks	Test 1 4th Week of October
Unit-3	Investment Management: meaning and importance. Investment avenues: equity, debt, gold, real estate, mutual funds, exchange traded funds. Portfolio management: meaning, construction, evaluation and revision. Loan management: meaning, types, importance and assessment, personal, car loan, home Loan etc.	4 Weeks	Assignment 2 2nd Week of November
Unit-4	Tax planning: basics terms of income tax, advance tax, tax deduction at source, deductions under section 80C, 80 CCC, 80 D and 80 G. Taxation of investment products. Retirement planning, Management of nomination, power of attorney and will.	3 Weeks	Viva-voce Exam 2nd Week of November
Revision	Revision	1 Week	-

Shiv Kumar

Assistant Professor (Commerce)

Name of Teacher: **Shiv Kumar** Class: **B.Com. 2nd Sem. - 3**

Subject: **Computerized Accounting System** Paper: **BCOM 304**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction: installation of Tally, ERP9 – Licensing configurations – Tally Vault Password – Security Control in Tally, ERP9 – Splitting Company Data – Backup and Restore.	3 Weeks	Project cum Test 2nd Week of October
Unit-2	Accounting: voucher entry, budget, cost center, balance sheet, profit and loss account, currency, debit note, credit note, interest calculation.	3 Weeks	Test 2 4th Week of October
Unit-3	Inventory: stock item, sales order, purchase order, delivery note, rejection out. Computerized Tax Liability Calculation.	3 Weeks	Assignment 2nd Week of November
Unit-4	Payroll: Salary Accounting – Introduction to Payroll – Payroll Masters – Payroll Vouchers – Overtime Payment – Gratuity – Advanced Payroll Transactions Basic Salary, Overtime, Bonus, Gratuity, Loan, ESI, Provident Fund, Pension, Commission.	3 Weeks	Viva-voce Exam 2nd Week of November
Revision	Revision	1 Week	-

Shiv Kumar

Assistant Professor (Commerce)

Govt. College Hansi

Lesson plan

Unit wise lesson plan for the odd Semester- 2022-23

Teacher- Aakanksha **Class: M.com Final**

Subject: Human Resource Planning

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Human resource planning: Concept, Objective, Benefits, Problems, Strategic HRP, Job analysis	From 16th August to 31 August	.

Unit 2	Human resource planning process and action plan Human resource demand and supply assessment and technique Recruitment, Selection, Sepration, Retention, Training and Redeployment	From 1 September to 30 September	1st Minor test in the first week of and 1st assignment 2nd week of September
Unit 3	Productivity Management and HRP: Work study, Method study, Work Measurement, Job design, Work scheduling	From 1 October to 31 October	2nd assignment in the second week of October
Unit 4	Human resource information system, HR accounting and audit, Structure of labor force and demographic changes, Problem and challanges	From 1Nov.to 30th November	2nd test in the second week of November
Revision	Revision, presentation, problem solving	From 1Dec. Onward	…….

Department:- Commerce

Name of the Teacher:- Mr. SHIV RATTAN **Class:-** B.Com 5th Sem.

Subject- Auditing **Paper**- BC-505

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	**Introduction:** Meaning, objectives & advantages of auditing; Types of audit: internal & external audit, propriety & efficiency audit.	25th Aug.-31st Aug.	1st Assignment in the 2nd Week of September
Unit 2	**Audit Process:** Audit programme; audit working papers & evidences; audit of e-commerce transactions. **Methods of Audit Work:** Routine checking & test checking; internal control & internal checking system.	1st Sept. – 15th Sept.	2nd Assignment in the Last Week of September
Unit 3	**Vouching:** Meaning, objectives & importance of vouching, vouching of cash books, sale book, bill receivable book, journal proper & debtor & creditor ledgers, verification of assets & liabilities. **Audit of Limited Companies:** Company auditor-appointment, powers, duties & liabilities,	16th Sept. – 15th Oct.	Minor Test in the 2nd Week of October

	Directions of comptroller & Auditor General of India.		
Unit 4	**Audit Reports. Investigation:** Meaning, nature, procedure & objectives, investigation & Due Diligence. Professional Ethics of auditing.	16th Oct. – 5th Nov.	……
Revision	Revision, Problem Solving & Quizzes	2nd Week of Nov. Onwards	……

Department:- COMMERCE

Name of the Teacher:- Mr. SHIV RATTAN **Class:-** M.Com 1st Sem.

Subject:- Financial A/c & Reporting **Paper:-** MC-104

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	**Introduction to Accounting:** Meaning, nature & scope, branches of accounting; GAAP: Demand & supply of financial statement information: Parties demanding financial statement information. Conflicts among parties, factors affecting demand for financial statement information.	8th Oct. – 31st Oct.	1st Assignment in the 2nd Week of November
Unit 2	**Accounting Cycle:** Business transactions & source documents. Analyzing transaction, Journalizing & posting transactions, preparing a trial balance, adjusted trial balance & preparation of financial statements of trading concerns.	2nd Nov.-20th Nov.	1ST Minor Test in the Last Week of Nov.
Unit 3	**The conceptual framework of financial Statements:** Purpose of the framework, scope & coverage. Qualitative characteristics of financial statements, Concept of capital & capital maintenance. Performa financial statements of corporate entities. Significance of notes to financial statements & accounting policies. Other financial reports: Auditor's report, Directors report & corporate governance report.	21st Nov. – 30th Nov.	2ND Minor Test in the 1st Week of Dec.
Unit 4	**Quality of earnings:** Window dressing, Creative financial practices, impact of extraordinary items. Quality of disclosure in reported earnings. Financial Distress: Meaning, indicators, models of distress prediction.	1st Dec. – 15th Dec.	2nd Assignment in the 2nd Week of Dec.
Revision	Revision, Problem Solving & Quizzes	16th Dec. Onwards	……

Teacher: Shiv Rattan Mittal & Surender Kumar

Class: B.COM 1st **Subject: Principles of B.Mgt**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Business: Nature and scope of Business; Forms of Business, Management: Definition, characteristics, scope and importance of management; Functional areas of management; Management and Administration; Levels of Management; Mintzberg's Managerial Roles.	From 26th August to 15th October.	1st assignment in the 1st week of October.
Unit 3	Planning: Definition, Nature, Objectives and importance, Planning Process, Types of Plans, Barriers to Effective Planning. Organizing: Definition, Nature, Principles of Organisation, Types of Organisation, Organizational Structure, Authority, Delegation and Centralization vs. Decentralization	From 26th August to 15th October.	2nd assignment in the 1st week of October.
Unit 2	Approaches to Management: Classical and Neo classical approach, Behavioural approach, Management science approach, Systems approach and Contingency approach- Highlighting the contributions of Henry Fayol, F.W. Taylor and Peter F. Drucker; Contemporary developments in approaches; Theory Z, McKinsey -7's, Quality Management.	From 16thOctober to 15th December.	1st Minor test in 3rd Week of November.
Unit 4	Staffing: Meaning, importance and scope, Matching job and people. Motivation: concept, objectives & significance. Leadership: concept, significance & functions, Leadership styles, approaches to leadership. Controlling: meaning and characteristics of control, process of control,	From 16thOctober to 15th December.	2nd Minor test in 3rd Week of November.

	prerequisites of an effective control system; controlling techniques.		
Revision	Revision, presentation, problem solving	From 15th December & Onwards	…….

Teacher: Surender Kumar **Class: B.COM 1st**

Section: **Subject: Financial Accounting**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Financial accounting: meaning, need, objectives & scope; book-keeping and accounting; branches of accounting; GAAP & FASB accounting principles: concepts and conventions; and accounting equation; journal; rules of journalizing;	From 26th August to 15th September	1st assignment in the 2nd week of September.
Unit 2	Accounting cycle: Classification of accounts, Journal, Rules of debit and credit, Compound journal entry, Ledger, Rules regarding posting, Trial balance, Sub-division of journal.	From 16th September to 15th October.	Minor 1st test in the 2nd week of October.
Unit 3	Capital and Revenue: Classification of income, expenditure and receipts, deferred revenue expenditure, Provisions and Reserves: Kinds of provisions and reserves, Difference between provision and reserve. Depreciation Accounting: Concept, causes of depreciation, Need for providing depreciation, factors determining the amount of depreciation, methods of charging and recording depreciation.	From 16th October to 15th November.	2nd assignment in the 1st week of November.
Unit 4	Accounting for not-for profit organizations: Receipt and Payment Account, Income and Expenditure Account, Receipt and Payment Account versus Income and Expenditure Account Financial statements of profit-making entities: Manufacturing Account, Trading Account, Profit	From 16th November to 15th December.	2nd Minor test in the 1st week of December.

	and Loss Account, Balance Sheet, Difference between Profit and Loss Account and Balance Sheet, Adjustments in final accounts.		
Revision	Revision, presentation, problem solving	From 16th December & Onwards	…….

Teacher: Surender Kumar **Class: B.COM 1st**

Section: **Subject: Micro Economics**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Basic economic concepts: Nature and scope of microeconomics; circular flow of economic activity, positive and normative economics, deductive and inductive methods of analysis, assumptions of economics, production possibility frontier. Theory of demand, demand function, elasticity of demand, Theory of supply, Supply function; Elasticity of supply, the consumer surplus, shift in supply and demand curve and market/ price equilibrium, exceptions of law of demand and supply,	From 26th August to 15th September.	1st assignment in the 2nd week of September.
Unit 2	Theory of consumer behavior: Law of diminishing marginal utility, Cardinal utility approach consumer equilibrium with single commodity and multi commodity model. Ordinal utility approach - Indifference curve, IC Map, characteristics, IC analysis, consumer equilibrium, price effect- Income and substitution and their analysis, derivative of demand curve through cardinal and ordinal utility approach.	From 16th September to 15th October.	Minor 1st test in the 2nd week of October.
Unit 3	Laws of production: Law of variable proportion, Returns to a scale, Production isoquants, marginal rate of technical substitution, optimal combination of resources, the expansion path, returns to scale using isoquants. Theory of Cost: Social and private costs of production, long run and short run costs of production. Traditional theory of cost, Modern theory of cost, Economies and diseconomies of scale. Concepts of revenue: marginal and Average. Relationship between average and marginal revenue.	From 16th October to 15th November.	2nd assignment in the 1st week of November.

Unit 4	Accounting for not-for profit organizations: Receipt and Payment Account, Income and Expenditure Account, Receipt and Payment Account versus Income and Expenditure Account Financial statements of profit-making entities: Manufacturing Account, Trading Account, Profit and Loss Account, Balance Sheet, Difference between Profit and Loss Account and Balance Sheet, Adjustments in final accounts.	From 16th November to 15th December.	2nd Minor test in the 1st week of December.
Revision	Revision, presentation, problem solving	From 16th December & Onwards	…….

Teacher: Surender Kumar **Class: M.com (P)**

Section: --- **Subject: MP &OB**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Meaning, Nature and scope of management, Management thoughts, Approaches to management, Scientific process, and Decision theory school, and Quantitative and system school, contingency theory of management, Managerial skills, and Social responsibility of managers.	From 8th October to 15th November.	Group Discussion
Unit 2	Managerial function: Planning-concepts, significance, types, Organizing-concepts principles, types of organization, authority and responsibility, power, delegation. Decentralization, Staffing, directing (Leading ,motivating and communicating) Coordinating, controlling process and techniques	From 16th November to 30 November.	1st Minor test & 1st Assignment in the third week of November.
Unit 3	Organizational Behaviour: Concepts, determinants, challenges and opportunity of OB, contributing disciplines to the OB, Organization culture and climate, Factors affecting of OB, understanding and managing individual behaviour, Personality, Perception, Values, Attitudes and Learning.	From 1st December to 15th December.	2nd assignment & 2nd test in the First week of December..

Unit 4	Understanding and managing group behaviour, Interpersonal and group dynamics, Transactional analysis, Application of emotional intelligence in organization, Communication process, models of communication, issues in organizational communication, Organization change, to analyze the major concepts of organizational behaviour in business organizational development, Conflicts management and stress management ,	From 1^{6th} December & Onwards	Presentation
Revision	Revision, presentation, problem solving		…….

Teacher: Vijay Rana & Maggi Class: B. Com II

Section: A Subject: Fundamentals of Insurance

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Introduction to insurance: life and general insurance, purpose, need and principles of insurance; insurance as a social security tool; insurance & economic development. Contract of life insurance: Principles & practice of life insurance; Parties to the contract, Their rights & duties; T&C of policies, Effects of non-compliance; Nomination & Assignment practices in connection with collection of premium, Revivals, Loans, Surrenders, Claims, Bonuses & Annuity payments; Present structure & growth of life insurance in India; Claim settlement procedure.	From 16th August to 15TH October	1st assignment in the 1ST week of October.
Unit 3	Marine insurance: Marine insurance policies & its conditions, Premium, Double insurance; Assignment of policy warranties, Voyage; Loss & Abandonment; Partial losses & particular charges; Salvage, Total losses & Measures of indemnity; Claim settlement procedure.	From 16th August to 15TH October	2nd assignment in the 1st week of October.

Unit 2	Fire insurance: Principles of fire insurance contracts; Fire insurance policies, conditions, Assignment of policies, Claim settlement procedure.	From 16 October to 30th November	1st Minor test in the 3rd week of November.
Unit 4	Accident & Motor insurance: Policy & Claim settlement procedure. Insurance intermediaries-Role of Agents & procedure for becoming an agent; cancellation of licence, Revocation/Suspension/Termination of agent appointment; Code of Conduct; Unfair practices.	From 16 October to 30th November	2nd Minor test in the 3rd week of November.
Revision	Revision, presentation, problem solving	From 1ST December & onwards	…….

Teacher: Mrs. Maggi Class: B.COM III

Section: (A&B) Subject: Income Tax-I

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Introduction to income tax: concept, tax, person, income, agricultural income, casual income, previous year, financial year, assessment year, gross total income, total income, tax management, tax evasion, avoidance and tax planning.	From 16th August to 15th September	1st assignment in the 2nd week of September.
Unit 2	Basis of charges, scope of total income, residence and tax liability, income which does not form part of total income. Heads of income: Income from salary.	From 16th September to 15th October.	2nd assignment in the 2nd week of October.
Unit 3	Heads of income: House property; Profits and gains from business and profession.	From 16th October to 15th November.	Minor test in the 2nd week of November.

Unit 4	Capital gains; Income from other sources; Clubbing and aggregation of income; Provisions regarding set off and carry forward of losses.	From 16th November to 30th November.	…….
Revision	Revision, presentation, problem solving	From December onwards.	…….

Teacher: Maggi **Class: M.com (F)**

Section: --- **Subject: Leadership Dynamics**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Leadership Dynamics: Concept, Leadership & Management, Leadership & Process, Successful Leadership versus Effective Leadership	From 16th August to 15th September	1st assignment in the 2nd week of September.
Unit 2	Leadership Approaches: Trait Approach, Skill Approach, Behavioural Approach, Situational Approach, Contingency Approach, Path Goal Approach.	From 16th of September to 15th October.	1st Minor test & 2nd assignment in the 2nd week of October.
Unit 3	Leadership Styles: Autocratic, Democratic, Participative, Supportive, Free-rein; Comparative Analysis of Leadership Styles; Building Effective Leadership Styles, Leadership styles of famous Personalities in general perspective and in managerial perspective.	From 16th October to 15th of November	2nd Minor Test in 2nd week of November
Unit 4	Contemporary Issues in Leadership: Charismatic Leadership, Women Leadership, Multicultural Leadership, Team Leadership, Ethics in Leadership, Servant Leadership, Transactional & Transformational Leadership.	From 16th of November to 30th November	Presentation
Revision	Revision, presentation, problem solving	From December onwards	…….

Lesson Plan

Government College, Hansi Unit wise Lesson Plan for **Odd Semester 2022-23** Name of Teacher: Sushila

Class: **B. Com 2 (3rd Sem.)** Subject: Fundamental of Insurance

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to insurance; life and general insurance;purpose, needs and principals of insurance; insurance as a social security tool.	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	Contract of life insurance: principals and practice of life insurance; parties to the contract, their rights and duties; claim settlement producer.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Fire insurance: principals of fire insurance contracts; fire insurance policy.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Fire insurance: conditions, assignment of policy, claim settlement producers.	27 October 2022 to 19 November 2022	
Revision	Unit 1, unit 2, unit 3 and unit 4.	21 November 2022 to 7 December 2022	

Lesson Plan

Government College, Hansi Unit wise Lesson Plan for **Odd Semester 2022-23** Name of Teacher: Sushila

Class: M.Com 1st sem Subject: Business statistics

Unit-1	Description of Chapter / Topics	Duration	Assignment / Test
Center tendency value ,dispression theoretical prison,Probabilities theorium multiple theorium and conditional probability. Buys theorium. Theoretical probability distribution. Binomial distribution Normal and Possion distribution ,there characteristics and applications.		8 October 2022 to 25 October 2022	1st assignment in the last week of September

Unit-2	Sampling probability and non probability distribution methods and applications hypothesis t-tests,Z-test F test anylisis of variance.chi square test , kruskal test.	28 October 2022 to 15 November 2022	Minor Test in the last Week of September
Unit-3	Correlation analysis: simple ,partial and multiple correlations:Regressions analysis: simple regression modal, medenrnary least square method. Time series analysis: component of a time series and their measurements and uses.	16 November 2022 to 30 November 2022	2nd Assignment in the First Week of October
Unit-4	Index numbers: meaning and types, method for measuring indices, adequacy of indices; statistical quality control : causes of variations of quality, Control charts, Acceptance sampling.	1 December 2022 to 31 December 2022	
Revision	Taking problems and revision of all units. Group disscision presentation seminar will be connected time to time.	1 January 2023 to 10 January 2023	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for odd Semester 2022-23

Department: Commerce

Name of Teacher: Sushila Class: B.Com 5th sem

Subject: Goods and services tax Section A and B

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1)Tax Structure in India 2) Overview of GST 3) Administration of GST 4) Taxable Event and Scope of Supply under GST	16August-12September	Assigment 1 with presentation

Unit-2	5) Levy and Connection of Tax 6) Small Taxable Persons : Exemptions and Compostion Scheme 7) Time of Supply 8) The Integrated Goods and Services Tax Act, 2017	12 September to 30 September 2022.	Test
Unit-3	9) Nature of Supplies : Inter-State and Intra- state 10)Place of Supply 11)Value of Taxable Supply 12)Input Tax Credit 13)Registration	1 October 2022 to 21 October 2022	Assigment 2 with viva
Unit-4	14)Tax Invoice, Credit and Debit Notes 15)Returns, Assessment and Audit 16)Payment of Tax 17)Offences and Penalties	27 October 2022 to 19 November 2022	Test
Revision	Revision and taking problems with group discussion and presentation.	21 November 2022 to 7 December 2022	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: Commerce

Name of Teacher : Aakanksha Class: B.com final

Paper: Cost Accounting

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Nature and scope of cost accounting;Cost concepts and classification; methods and techniques of material losses, mat	16 August to 31 August	
Unit-2 and unit-3	Material planning and purchasing, Pricing of material issue; Treatment of material losses; Material and inventory control; concepts and techniques;Labour cost control procedure;labour turnover; Ideal time and overtime, methods of wage payment	1 September to 30th September	first assignment in the 2nd week of September
Unit-4 and Unit-5	Classification, Allocation, Apportionment and absorption of overheads; Under and over-absorption; Unit costing; job costing; Contract costing;	1 October to 31 October	First minor test in the first week of October
Unit-6	Process costing (process losses, Valuation of work in progress,joint and by- product) Service costing Standard Costing and variance analysis : material and labour. Cost control and reduction; cost audit; An overview of audit standards.	1 November to 30th Nov.	2nd assignment in the first week and 2 nd test in last week of Nov.
Revision	Revision	From 1Dec.onward	

Govt. College Hansi

Lesson plan

Unit wise lesson plan for the odd Semester- 2022-23

Teacher: Aakanksha **Class: B.com final**

Section: --- B **Subject: Supply chain Management**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Supply chain management: meaning, Approaches and Importance of Supply chain management	From 16th August to 31 August	.
Unit 2	Supply chain cordination, integrated supply chain management;A total cost approach of SCM,strategic SCM: Implementation and management	From 1 September to 30 September	1st Minor test in the first week of and 1st assignment 2nd week of September
Unit 3	Supply chain marketing,Roll of transportation in supply chain, warehousing, Distribution channel	From 1 October to 31 October	2nd assignment in the second week of October
Unit 4	Customer service, information technology for SCM, Recent devlopments in SCM,Third party logistic	From 1Nov.to 30th November	2nd test in the second week of November
Revision	Revision, presentation, problem solving	From 1Dec. Onward	…….

Govt. College Hansi

Lesson plan

Unit wise lesson plan for the odd Semester- 2022-23

Teacher: Aakanksha **Class: B.com second**

Section: --- A **Subject: Indian Financial system**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Nature and roll of financial system, economic development and financial system	From 16th August to 31 August	
Unit 2	Money Market, capital market,depositories Security exchange Board of India	From 1 September to 30 September	1st Minor test in the first week of and 1st assignment 2nd week of September
Unit 3	Debt markets,RBI, Credit creation , credit control	From 1 October to 31 October	2nd assignment in the second week of October
Unit 4	Commercial banking in India, problem of Non performing assets in India , payment Banks and E-Banking in India, development Banks	From 1Nov.to 30th November	2nd test in the second week of November
Revision	Revision, presentation, problem solving	From 1Dec. Onward	…….

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: commerce

Name of Teacher : Sunita Class: B.com final

Subject: commerce Paper: cost Accounting

Unit	Description of Chapter / Topics	Duration	Assignment / Test

Unit-1	Nature and scope of cost accounting;Cost concepts and classification; methods and techniques of material losses, mat	16 August to 31 August	
Unit-2 and unit-3	Material planning and purchasing, Pricing of material issue; Treatment of material losses; Material and inventory control; concepts and techniques;Labour cost control procedure;labour turnover; Ideal time and overtime, methods of wage payment	1 September to 30th September	first assignment in the 2nd week of September
Unit-4 and Unit-5	Classification, Allocation, Apportionment and absorption of overheads; Under and over-absorption; Unit costing; job costing; Contract costing;	1 October to 31 October	First minor test in the first week of October
Unit-6	Process costing (process losses, Valuation of work in progress,joint and by- product) Service costing Standard Costing and variance analysis : material and labour. Cost control and reduction; cost audit; An overview of audit standards.	1 November to 30th Nov.	2nd assignment in the first week and 2 nd test in last week of Nov.
Revision	Revision	From 1Dec.onward	

Govt. College Hansi

Lesson plan

Unit wise lesson plan for the odd Semester- 2022-23

Teacher: Sunita **Class: B.com second**

Section: --- A **Subject: Business Law**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Meaning and essential elements of contract,offer and acceptance, consent and free consent, void agreement, quasi contract, performance of contract, mode of discharge of contract, remedies for breach of contract	From 16th August to 20 September	
Unit 2	Contract of indemnity and guarantee, Bailment and pledge, contract of agency	From 21September to 30 September	1st Minor test in the first week of and 1st assignment 2nd week of September
Unit 3	Sale of goods Act: Definition and essential elements of a contract of sale, conditions and warrantees, transfer of property, performance of contract of sale,right of unpaid sailor, remedies for breach of contract	From 1 October to 31 October	2nd assignment in the second week of October
Unit 4	Negotiable Instruments: meaning, elements, types, Meaning and scope of information technology Act:- digital signature, electronic governance, regulation of certifying authority, digital signature certificate, penalties, adjudication of offences	From 1Nov.to 30th November	2nd test in the second week of November
Revision	Revision, presentation, problem solving	From 1Dec. Onward	.....

Govt. College Hansi

Lesson plan

Unit wise lesson plan for the odd Semester- 2022-23

Teacher: Sunita **Class: B.com second**

Section: --- B **Subject: Indian Financial system**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Nature and roll of financial system, economic development and financial system	From 16th August to 31 August	
Unit 2	Money Market, capital market,depositories Security exchange Board of India	From 1 September to 30 September	1st Minor test in the first week of and 1st assignment 2nd week of September
Unit 3	Debt markets,RBI, Credit creation , credit control	From 1 October to 31 October	2nd assignment in the second week of October
Unit 4	Commercial banking in India, problem of Non performing assets in India , payment Banks and E-Banking in India, development Banks	From 1Nov.to 30th November	2nd test in the second week of November
Revision	Revision, presentation, problem solving	From 1Dec. Onward	.....

Govt. College Hansi

Lesson plan

Unit wise lesson plan for the odd Semester- 2022-23

Teacher: Sunita **Class: B.com final**

Section: --- A **Subject: Supply chain Management**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Supply chain management: meaning, Approaches and Importance of Supply chain management	From 16th August to 31 August	.
Unit 2	Supply chain cordination, integrated supply chain management;A total cost approach of SCM,strategic SCM: Implementation and management	From 1 September to 30 September	1st Minor test in the first week of and 1st assignment 2nd week of September
Unit 3	Supply chain marketing,Roll of transportation in supply chain, warehousing, Distribution channel	From 1 October to 31 October	2nd assignment in the second week of October
Unit 4	Customer service, information technology for SCM, Recent devlopments in SCM,Third party logistic	From 1Nov.to 30th November	2nd test in the second week of November
Revision	Revision, presentation, problem solving	From 1Dec. Onward	.....

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2022-23

Department: commerce

Name of Teacher : Sunita Class: B.com final

Subject: commerce Paper: cost Accounting

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Nature and scope of cost accounting;Cost concepts and classification; methods and techniques of material losses, mat	16 August to 31 August	
Unit-2 and unit-3	Material planning and purchasing, Pricing of material issue; Treatment of material losses; Material and inventory control; concepts and techniques;Labour cost control procedure;labour turnover; Ideal time and overtime, methods of wage payment	1 September to 30th September	first assignment in the 2nd week of September
Unit-4 and Unit-5	Classification, Allocation, Apportionment and absorption of overheads; Under and over-absorption; Unit costing; job costing; Contract costing;	1 October to 31 October	First minor test in the first week of October
Unit-6	Process costing (process losses, Valuation of work in progress,joint and by- product) Service costing Standard Costing and variance analysis : material and labour. Cost control and reduction; cost audit; An overview of audit standards.	1 November to 30th Nov.	2nd assignment in the first week and 2 nd test in last week of Nov.
Revision	Revision	1 Dec to 7 Dec	

Name of Teacher: **Shilka** Class: **B.Com. 2nd Sem. - 3**
Subject: **Computerized Accounting System** Paper: **BCOM 304**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction: installation of Tally, ERP9 – Licensing configurations – Tally Vault Password – Security Control in Tally, ERP9 – Splitting Company Data – Backup and Restore.	16th August to 7th September	Project cum Test 1st Week of September.
Unit-2	Accounting: voucher entry, budget, cost center, balance sheet, profit and loss account, currency, debit note, credit note, interest calculation.	8th September to 30th September	Test 2 4th Week of October
Unit-3	Inventory: stock item, sales order, purchase order, delivery note, rejection out. Computerized Tax Liability Calculation.	1st October to 25th October	Assignment 3rd Week of October
Unit-4	Payroll: Salary Accounting – Introduction to Payroll – Payroll Masters – Payroll Vouchers – Overtime Payment – Gratuity – Advanced Payroll Transactions Basic Salary, Overtime, Bonus, Gratuity, Loan, ESI, Provident Fund, Pension, Commission.	26th October to 30th November	Viva-voce Exam 2nd Week of November
Revision	Revision	December month onwards	-

Shilka
Extention Lecturer (Commerce)

Teacher: Shilka Class: B.COM 1st

Section: A Subject: Computer Application in Business (Practical) .

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Introduction to MS Office : MS Word : Home ,Insert ,Page Layout, Reference,Mailing, Envelopes,Labels,Hyperlinks etc.	From 25th August to 24th September.	Practical test in the 2nd week of September.

Unit 2	Practice of MS Excel File ,Insert,Page Layout menu and Formulas and View Tab .	From 25th September to 24th October.	Practical test in the 2nd week of October.
Unit 3	Practice of MS PowerPoint Presentations,slides etc.	From 25th October to 15th November.	Practical test in the 2nd week of November.
Unit 4	Practice of all Shortcut Keys used in Ms Office and Function keys.	From 16th November to 5th December.	Revision And Practice
Revision	Revision, presentation, problem solving	6th December to Upto Exam.	Viva-Voce .

Shilka

Extention lecturer In Commerce.

Name of Teacher: **Vijay Kumar Yadav** Class: **M.Com. (F) Sem. - 3**
Subject: **Consumer Behaviour** Paper: **MCM - 322**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Consumer Behaviour- Introduction to consumer behaviour; Its Roots in Various Disciplines, Interrelationship between Consumer Behaviour and Marketing Strategy, Consumer Research; Process, Research Methods & Tools, Types and its Relevance.	3 Weeks	Quiz 1, Assignment 1, cum Test 2nd Week of October
Unit-2	Consumer as an Individual -Consumer Needs and Motivation; Goals, Dynamics of Motivation, Measurement of Motives, Personality and Consumer Behaviour; Nature, Theories of Personality and Self Concept, Consumer Perception and Information Processing; Dynamics of Perception, Consumer Imagery, and Perceived Risk, Learning & Consumer Involvement; Meaning, Behavioural & Cognitive Learning Theories and application to marketing, Consumer Attitude; Meaning, Attitude Formation & Change, Relationship in Behaviour & Attitude Formation, and Structural Models.	2 Weeks	Quiz 2 cum Test 4th Week of October
Unit-3	Group Dynamics and Consumer Behaviour - Reference Groups; Meaning, Types, Affects, Relevance and Applications, The Family; Functions, Decision Making and Family Life Cycle, Social Class; Meaning, Types of Status, Lifestyle Profiles and Mobility in Social Classes, Measurements, Influence of Culture; Characteristics, Measurements & Core Values of Culture, Sub Cultural Aspects on Consumer' Mind Set; Meaning, Types & Understanding of Multiple Sub cultural Membership Interaction &Influence.	4 Weeks	Assignment 2 2nd Week of November

Unit-4	Consumer Decision Making Process- Personal Influence and the Opinion Leadership; Meaning and Dynamics of Opinion Leadership Process, Measurement of Opinion Leadership, Diffusion of Innovations; Process of Diffusion & Adoption, Profile of Consumer Innovator, Consumer Decision Making; Meaning of Decision, Levels of Decision Making. Consumer Behaviour Models, Current trends and ethical issues in Consumer Behavioural Studies.	3 Weeks	Viva-voce Exam 2nd Week of November
Revision	Revision	1 Week	-

Vijay Kumar Yadav
Assistant Professor (Commerce)

GOVERNMENT COLLEGE HANSI
Department of Commerce
Lesson Plan for Odd Semester 2022-23

Name of Teacher: **Vijay Kumar Yadav** Class: **B.Com. 2nd Sem. - 3**
Subject: **Computerized Accounting System (Practical)** (3-6 days) Paper: **BCOM 304**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Practical 1 to 5	3 Weeks	
Unit-2	Practical 6 to 10	3 Weeks	
Unit-3	Practical 11to 15	3 Weeks	
Unit-4	Practical 16 to 20	3 Weeks	
Revision	Revision	1 Week	-

Vijay Kumar Yadav
Assistant Professor (Commerce)

GOVERNMENT COLLEGE HANSI
Department of Commerce
Lesson Plan for Odd Semester 2022-23

Name of Teacher: **Vijay Kumar Yadav** Class: **B.Com. 2nd Sem. - 3**
Subject: **Business Statistics – I** Paper: **BCOM 302**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction of statistics: Development, Definition, Scope and Limitations. Collection of data methods, methods of collecting primary data, classification – Functions, Rules and bases of classification, Frequency distribution and its types, Tabulation-meaning, types, parts and requisites of good table .	3 Weeks	Assignment 1, cum Test 2nd Week of October
Unit-2	Presentation through diagrams –general rules, types and choice of diagram. Graphic presentation –general rules for graphing, graphs of frequency distribution and histograms. Concept and measures of central tendency: Mathematical averages, positional average and partition values.	3 Weeks	Test 4th Week of October
Unit-3	Measures of dispersion in detail: Absolute and relative measures of dispersion-Range, Quartile deviation, Mean deviation, Standard deviation, Variance. Measures of Skewness - Karl Pearson's, Bowley's and Kelly's coefficient of skewness, coefficient of skewness based on moments.	3 Weeks	Assignment 2 2nd Week of November
Unit-4	Correlation -Types, methods-Scatter diagram method, Karl Pearson's coefficient of correlation, standard error of estimate, Co-efficient of determination. Regression –Linear and non linear. Lines of regression, coefficients of regression, correlation vs. regression analysis	3 Weeks	Viva-voce Exam 2nd Week of November
Revision	Revision	1 Week	-

Vijay Kumar Yadav
Assistant Professor (Commerce)

Department of Computer Science

Name of Teacher: **Dr. Banta Singh Jangra,** Class: **PGDCA (1st Sem.)**
Subject: **Introduction to IT** Paper: **PGDCA-101**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Computer Fundamentals:** Introduction to Computers: Characteristics and Limitations of Computers, Evolutions of Computers, Classification of Computers, Computer Languages, Types of software, Structured Programming Concepts. **Basic Computer Organization**: Units of a computer, CPU, ALU, Memory Hierarchy, Registers, I/O devices, Mother Board.	14-Oct-22 To 15-Nov-22	Assignment-1
Unit-2	**Word Processing:** Introduction to MS-Word, Creating & Editing Text: Paragraph Formatting, Page Formatting, Template, Page, Views, Table; Advanced Features: Bookmark, Mail Merge, Macros.	16-Nov-22 To 30-Nov-22	Test-1
Unit-3	**Spread Sheets:** Introduction to MS-Excel, Creating & Editing Worksheet, and Formatting data, Formulas and Functions, Creating Charts, Pivot Tables. **Power Point Presentations:** Creating, Manipulating & Enhancing Slides, Organizational Charts, Animations & Sounds, Inserting Animated Pictures	1-Dec-22 To 10-Dec-22	Assignment-2
Unit-4	**Internet Basics:** History of Internet, Web Browsers, Web Servers, Hypertext Transfer Protocol, Internet Protocols Addressing, Internet Connection Types, How Internet Works, ISPs, Search Engines, Emails and Its Working, Internet Security, Uses of Internet, Computer Networks and their advantages, Types of Computer Network, Network Topologies, Basics of Transmission Media; Cloud Computing Basics: Overview, Applications, Intranets and the Cloud; Benefits, Limitations and Security Concerns.	11-Dec-22 To 25-Dec-22	Mock Test
Revision	Revision of Syllabus and Students Query Handling with Sample Papers	26-Dec-22 To Exam Date	

Lesson Plan 2022-23

Government College, Hansi

Unit wise Lesson Plan for ODD Semester Oct./Dec.-2022/23

Department: Computer Science

Name of Teacher: **Dr. Banta Singh Jangra,** Class: **M.Com (3rd Sem.)**

Subject: **E-Commerce** Paper: **MC-301**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Technology and Infrastructure for E-Commerce: Framework of E-commerce; Network Infrastructure for E Commerce – Market Forces Influencing I-way, Network Access Equipment, Public Policy Issues Shaping the I-way; EDI - Applications in Business, Legal, Security and Privacy Issues of EDI; Components of EDI Standards, ASC X12 and EDIFACT.	14-Oct-22 To 15-Nov-22	Assignment-1
Unit-2	E-Commerce and Retailing: Changing Retail Industry Dynamics, Mercantile Models from the Consumer's Perspective, Management Challenges in Online Retailing. Intranets and Customer Asset Management: Basics of Customer Asset Management, Online Sales Force, Online Customer Service and Support, Technology and Marketing Strategy	16-Nov-22 To 30-Nov-22	Test-1
Unit-3	Intranets and Manufacturing: Integrated Logistics, Agile Manufacturing, Emerging Business Requirements, Manufacturing Information Systems, Intranet-based Manufacturing, Logistics Management. E-Commerce and Online Publishing: Why Online Publishing, Online Publishing approaches, Advertising and Online Publishing. E-Commerce and Banking: Changing Dynamics in the Banking Industry, Home Banking Implementation Approaches, Management Issues in Online Banking.	1-Dec-22 To 10-Dec-22	Assignment-2
Unit-4	Intranets and Corporate Finance: An Introduction, Financial Systems, Financial Intranets, Software Modules in Financial Information Systems, Human Resource Management Systems, Size/Structure of Financial Software Market. Lab: Each student is required to develop at least one application of e-commerce.	11-Dec-22 To 25-Dec-22	Mock Test
Revision	Revision of Syllabus and Students Query Handling with Sample Papers	26-Dec-22 To Exam Date	

Name of Teacher: **Dr. Anju Jain**
Class: **BCA-II (3rd Sem.)** Subject: **Introduction to Database Systems**
Course code: **BCA-PC (L)-234**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Basic Concepts- Data, Information, Records and Files. Traditional file –based System- File based Approach-Limitations of File based Approach, Database Approach- Characteristics of File based Approach, Database Management System(DBMS), Components of DBMS Environment, DBMS Functions and Components, Advantages and Disadvantages of DBMS.	16th August to 31st August , 2022	Assignment-1
Unit-2	Roles In the Database Environment – Data and Database Administrator, Database Designers, Applications Developers and Users. Database System Architecture – Three Levels of Architecture, External, Conceptual and Internal Levels, Schemas, Mappings and Instances. Data Independence – Logical and Physical data Independence.	1st September to 15th September, 2022	Test-1
Unit-3	Classification of Database Management System, centralized and Client Server Architecture to DBMS. Data Models: Records-based data Models, Object-based Data models, Physical Data Models and Conceptual Modeling.	16th September to 31st September, 2022	Test-2
Unit-4	Entity-Relationship model – Entity Types, Entity Sets, Attributes relationship Types, Relationship Instances and ER Diagrams. Basic Concepts of Hierarchical and Network Data Model.	1st October to 21st October, 2022	Mock Test
Revision	Revision of Syllabus and Students Query Handling	27th October 2022 to Exam Date	Presentation

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan Odd Semester **October – December, 2022**

Name of Teacher: **Dr. Anju Jain**

Class: **PGDCA (1st Sem.)** Subject: **Computer Programming Using C**

Course code: **PGDCA102**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Programming process:** Problem definition, Algorithm development, Flowchart, Program Coding, compilation, debugging,testing and execution, Types of errors. **C Programming Fundamentals:** Identifiers and keywords, Structure of C Program data types, input and output, type conversion.	8th October to 21st October 2022	Assignment-1
Unit-2	**Operators &Expressions**: Arithmetic, unary, logical and relational operators, assignment operator, Bit-wise, conditional operator, library functions. **Control statements:** Decision making using if, if-else, Nested IF, Else If Ladder switch, break, continue statement and goto Statement, looping using for, while and do-while statements, nested loops	27th October to 12th November, 2022	Minor Test-1
Unit-3	**Functions:** Library functions, Defining & accessing User defined functions, function prototype and passing arguments to a function, recursion versus iteration. Macro vs function. **Arrays:** Definition, accessing elements, initialization, passing to functions, multi-dimensional arrays, Strings & operations of Strings, String Handling through Built-in and User Defined Functions. Pointers declaration, assignment, Pointer Arithmetic, passing pointer to functions, pointer arrays, Dynamic Memory Allocation.	13th November to 3rd December, 2022	Minor Test-2
Unit-4	**Structure and Union:** Defining and Initializing Structure, accessing members, nested structures, pointer to structures, self-referential structures, **Unions:** Introduction to Unions and its Utilities. File Handling and Storage classes: automatic, register, external and static variables; Opening and Closing file in C,Modes of File,Reading and Writing data to a file.	4th December to 17th December, 2022	Quiz
Revision	Revision of Syllabus and Students Query Handling	18th December 2022 to 28th December 2022	Presentation

Department: Computer Science

Name of Teacher: **Dr. Suman Malik** Class: **BCA I (1st Sem.)**

Subject: **Problem Solving Through C** **Paper: BCA-PC(L)-115**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Overview of C: History of C, Importance of C, Structure of a C Program. Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables, Assignment statement, Symbolic constant. Operators & Expression: Arithmetic, relational, logical, bitwise, unary, assignment, conditional operators and special operators. Arithmetic expressions, evaluation of arithmetic expression, type casting and conversion, operator hierarchy & associativity.	22nd August, 2022 To 15th September, 2022	Assignment-1
Unit-2	Decision making & looping: Decision making with IF statement, IF-ELSE statements, Nested if statement, ELSE-IF ladder, switch statement, goto statement, while, and do-while loop, jumps in loops, break, continue statement. Functions: Definition, prototype, passing parameters, recursion.	16th September, 2022 to 10th October, 2022	Test
Unit-3	Arrays in 'C': Definition, types, initialization, processing an array, passing arrays to functions, Strings & arrays. Declaration and initialization of string, String I/O, Array of strings, String manipulation functions: String length, copy, compare, concatenate, search for a sub-string.	11th October, 2022 to 31st October, 2022	Assignment-2
Unit-4	Storage classes in C: auto, extern, register and static storage class, their scope, storage & lifetime. Pointers: Introduction, Pointer variables, Pointer operators, Pointer assignment, Pointer conversions, Pointer arithmetic, Pointer comparison, Pointers and arrays, Pointers and functions, Pointers and strings, dynamic allocation using pointers.	1st November, 2022 to 30th November, 2022	Performance Improvement Test
Revision	Revision of Syllabus and Students Query Handling	1st December, 2022 to Exam Date	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: Computer Science

Name of Teacher: **Dr. Suman Malik** Class: **BCA II (3rd Sem.)**

Subject: **Digital Electronics** **Paper: BCA-PC(L)-233**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Information Representation:** Number Systems, Binary Arithmetic Operations, fixed and floating point representation of numbers, BCD Codes, Error	16th August, 2022 to 10th September, 2022	Assignment-1

	detecting and correcting codes, Character representation – ASCII, EBCDIC Unicode. **Binary Logic:** Boolean Algebra, Boolean Theorems, Boolean Functions, Truth Tables, Canonical and Standard forms of Boolean Functions, Simplification of Boolean functions- Venn Diagram, Karnaugh Maps.		
Unit-2	**Digital Logic:** Basic Gates - AND, OR, NOT, Universal Gates - NOR, NAND Other Gates – XOR, XNOR etc. AND-OR-INVERT, OR-AND-INVERT, implementation of digital circuits, Combinational Logic- Characteristics, Design Procedures, analysis procedures, Multilevel NAND and NOR circuits.	11th September, 2022 to 30th September, 2022	Test
Unit-3	**Combinational Circuits:** Half Adder & Full Adder, Half Subtractor & Full Subtractor, Encoders, Decoders, Multiplexers, demultiplexers, Comparators, Code Converters BCD to Seven Segment Decoder.	1st October, 2022 to 25th October, 2022	Assignment-2
Unit-4	**Sequential Circuits:** Characteristics, Flip-Flops, Clocked-RS, T, D, JK and Master – Salve flip flops. State table, State diagram and State equations, Flip-flop excitation tables.	26th October, 2022 to 20th November, 2022	Performance Improvement Test
Revision	Revision of Syllabus and Students Query Handling with Sample Papers	21st November, 2022 to Exam Date	

Name of Teacher: **Dr. Kapil Kumar**

Class: **BCA-Ist (Ist Sem.)** Subject: **PC- Software**

Paper: **BCA-PC(L) -114 (Theory)**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Operating System, Definition and function, Basic of windows, Basic components of windows, Icons, Taskbar, activating window, desktop, title bar, managing files and folder, copying and moving files and folder, control panel, display properties, setting date and time, screen saver and appearance	25th Aug. to 20th Sept.	Assignment-1
Unit-2	Documentation using MS-Word, Introduction to office automation, creating and editing document. Auto text, auto correct, spelling and grammar checking, Page formatting, bookmark, advance features of MS word, mail Merge, macro, tables, template	21st Sept.. to 20th October.	Test-1
Unit-3	Electronic spreadsheet using MS excel, Introduction to MS-Excel, creating and editing spread sheet, formatting and essential operations, formulas and functions, charts, advances features of MS- Excel, Pivot table, pivot chart, linking and consolidation, sorting, filtering, table, validation	21st October to 20th Nov.	Assignment-2
Unit-4	Presentation using MS- Power point, presentation, creating, manipulating and enhancing slides, organizational charts, excel charts, word, art, layering art objects, animation and sounds, inserting animated	21st Nov. to 20th Dec.	Test-2

	pictures or accessing through object, inserting recorded sound effects or In-built sound effect.		
Revision		21st Dec. to Exam Date	

Name of Teacher: - **Dr. Kapil Kumar**

Class: **PGDCA-I (Ist Sem.)** Subject:**Web Technologies** Paper: PGD**CA-105 (Theory)**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to Internet, World Wide Web, Evaluation and History of WWW, Web Browsers, Hypertext transfer Protocol, Searching and Web Casting, Search Engines and Search tools	8 October to 31st october	Assignment-1
Unit-2	Steps for developing web Site, Choosing the contents, Home page, DNS, Internet Service Provider, Planning and designing web site, creating a web site, Web Publishing, Hosting Site	2 November to 25th November	Test-1
Unit-3	Introduction to HTML, HTML document features, HTML tag, Header, Title Body, Paragraph, Ordered and Unordered List, Creating Links, Header, Text styles, Text Structuring, Text colour and Background, Formatting Text, Page Layout, Insertion of text, Movement of text	26th November to 15th December	Assignment-2
Unit-4	Images, Types of Images, Movement of image, Ordered and unordered List, Inserting Graphics, Table Handling Functions like coloumns, Row width, colour, frame creation and layout, working with forms and menus, working with buttons like radio,chek box	16th December to 31st December	Test-2
Revision		1st January to exam date	

of Teacher: **Mrs. Priyanka** Class: **BCA-II (3rd Sem.)**

Subject: **Advanced Data Structures** Course code: **BCA-PC (L)-235**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Tree: Introduction, Definition, Representing Binary tree in memory, Traversing binary trees, Traversal algorithm using stacks, Header nodes, Threads, Binary search trees- Searching, Insertion and Deletion.	16th August to 05th September, 2022	Assignment I

Unit-2	AVL search trees: Introduction, Insertion and Deletion, m-way search tree: searching, insertion and deletion, B-tree: Insertion and deletion. Hashing: Introduction, Collision resolution.	6th September to 30th September,2022	Test I
Unit-3	Graphs: Introduction, Graph theory terminology, Sequential and linked representation of graphs, Warshall's algorithm for shortest path, Dijkstra algorithm for shortest path, Operations on graphs, Traversal of graph.	1st October to 21st October ,2022	Assignment II
Unit-4	Sorting: Internal & external sorting, Radix sort, Quick sort, Heap sort, Merge sort, Comparison of various sorting and searching algorithms on the basis of their complexity	27th October to 15th November,2022	Test II
Revision	Revision of Syllabus	16th November to exam date	Revision

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester (August – December, 2022)

Department: Computer Science

Name of Teacher: **Mrs. Priyanka** Class: **BCA-III (5th Sem.)**

Subject: **Computer Graphics** Course code: **BCA-PC (L)-352**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Graphics Primitives: Introduction to computer graphics, Basics of Graphics systems, Application areas of Computer Graphics, overview of graphics systems, video-display devices, and raster-scan systems, random scan systems, graphics monitors and workstations and input devices. Output Primitives: Points and lines, line drawing algorithms, mid-point circle and ellipse algorithms. Filled area primitives: Scan line polygon fill algorithm, boundary fill and floodfill algorithms .	16th August to 20th September, 2022	Assignment I
Unit-2	2-D Geometrical Transforms: Translation, scaling, rotation, reflection and shear transformations, matrix representations and homogeneous coordinates, composite transforms, transformations between coordinate systems. 2-D Viewing: The viewing pipeline, viewing coordinate reference frame, window to viewport coordinate transformation, viewing functions, Cohen-Sutherland and Cyrus-beck line clipping algorithms, Sutherland –Hodgeman polygon clipping algorithm.	21st September to 12th October, 2022	Test I
Unit-3	3-D Object Representation: Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves, Bezier and B-Spline surfaces. Basic illumination models, polygonrendering methods	13th October to 31st October ,2022	Test II
Unit-4	3-D Geometric Transformations: Translation, rotation, scaling, reflection and shear transformations, composite transformations. 3-D Viewing: Viewing pipeline, viewing coordinates, view volume and general projection transforms and clipping	1st November to 15th November, 2022	Assignment II
Revision	Revision of syllabus	16th November to Exam date	Revision

Name of Teacher: Uma Sharma Class: PGDCA

Subject: DBMS Paper: PGDCA104

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Overview: File Systems vs. DBMS, Characteristics of the Data Base Approach, Database users, Advantages and Disadvantages of a DBMS, Responsibility of Database Administrator. Data Base Systems Concepts and Architecture: Data Models, Schemas and	8th October to 14th November 2022	Assignment-1

	Instances, DBMS architecture and various views of Data, Data Independence, Database languages.		
Unit-2	Entity Relationship Model: Entity, Attributes, Types of Attributes, Entity set and Keys, Relationship set, Degree of Relationship, Roles and Structural Constraints, E-R Diagrams, Reduction of an E-R Diagram to Tables, Binary Representation and Cardinality, Participation Constraints	15th November to 29th November, 2022	Minor Test-1
Unit-3	Relational Data Model:-Brief History, Relational Model Terminology-Relational Data Structure, Database Relations, Properties of Relations, Keys, Domains, Integrity Constraints over Relations, Base Tables and Views.	30th November to 10th December, 2022	Minor Test-2
Unit-4	SQL: Introduction to SQL, Data Types in SQL, Common Commands in SQL- Select, Insert, Update and Delete, views in SQL; Relational Database Design: Functional Dependencies, Decomposition, Desirable properties of decomposition, Normal Forms (1 NF, 2 NF, 3 NF and BCNF).	11th December to 22th December, 2022	Quiz
Revision		23th December 2022 to 28th December 2022	Presentation

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Uma Sharma Class: BCA

Subject: Web Designing Paper: BCA-PC(L)-232

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to Internet and World Wide Web; Evolution and History of Word Wide Web; Basic features; Web Browsers; Web servers; Hypertext Transfer Protocol; URLs; Searching and WebCasting Techniques; Search Engines and Search Tools;.	16th August to 31st August , 2022	Assignment-1
Unit-2	Web Publishing: Hosting your Site; Internet Services provider; Planning and designing your Web Site; Steps for developing Your site; Choosing the contents; Home page; Domain Names;	1st September to 15th September, 2022	Test-1
Unit-3	Web Development: Introduction to HTML; Hypertext and HTML; HTML Document Features; HTML command Tags; Creating Links; Headers; Text styles; Text Structuring; Text colors and Background; Formatting text; Page layouts;.	16th September to 31st September, 2022	Test-2
Unit-4	Images; Ordered and Unordered lists; Inserting Graphics; Table Creation and Layouts; Frame Creation and layouts; Working with Forms and menus; Working with Radio buttons; Checks Boxes; Text Boxes;	1st October to 21st October, 2022	Mock Test
Revision	Revision of Syllabus and Students Query Handling	27th October 2022 to Exam Date	Presentation

Department: Computer Science

Name of Teacher: Surender Kumar Class:**BCA-III** Subject: Data Warehousing and Data Mining Paper: **BCA-PC(L)-354**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Data Mining**: Introduction, Kind of data to be mined, Data Mining Functionalities, Technologies used in Data Mining, Applications of data Mining, Major Issues in Data Mining	16th August to 22th September, 2022	Assignment I

Unit-2	**Data Pre-Processing**: Introduction, Need of preprocessing, Data Objects and Attribute type, Statistical description of data, Data Visualization, Measuring similarity and dissimilarity of data, Data Cleaning, Data Integration, Data Reduction, Data Transformation and Data Discretization	23st September to 15th October, 2022	Test 1
Unit-3	**Data Warehouse**: Introduction, Data Warehouse and Database Systems, Data Warehouse Architecture, Data Warehouse Models, Data Cube and OLAP, Multidimensional data Model, Concept Hierarchies, OLAP operations, Data Warehouse Implementation	15th October to 31st October ,2022	Test 2
Unit-4	Mining Frequent Patterns, Associations and Correlations: Introduction, Frequent Itemset Mining using Apriori Algorithm ,Generating Association Rule from Frequent Itemsets. Improving efficiency of Apriori, Pattern Growth Approach for Mining Frequent Itemsets, Pattern evaluation Methods.	1st November to 15th November, 2022	Assignment 2
Revision	Revision of syllabus	16th November to Exam date	Revision

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Surender kumar Class: BCA-III

Subject: **Programming using Python** Paper:BCA-PC(L)-351

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Introduction to Python:** History and Features of Python Programming, Python Interpreter. Variable, identifiers and literal. Token, keywords. Data Types. Arithmetic operators, Relational operators, Logical operators, Bitwise operators, Assignment operators, Membership operators, Identity operators. Operator precedence. Comment, Indentation, Need for indentation Built-in Functions: input, eval, composition, print, type, round, min and max, pow. Type Conversion, Random Number Generation. Mathematical Functions. Getting help on a function, Assert Statement.	16th August to 22th September, 2022	Assignment I
Unit-2	**Control Statements:** if Conditional Statement, for and while Statements. break, continue and pass statements. Functions: Function Definition and Call, Function Arguments-Variable Function Arguments, Default Arguments, Keyword Arguments, Arbitrary Arguments. Command Line Arguments. Global and local Variables. Accessing local variables outside the scope, Using Global and Local variables in same code, Using Global variable and Local variable with same Name.	23st September to 15th October, 2022	Test 1
Unit-3	**Strings:** String as a compound data type. String operations- Concatenation, Repetition, Membership operation, Slicing operation. String methods-count, find, rfind, capitalize, title, lower, upper, swapcase, islower, isupperistitle, replace, isalpha, isdigit, isalnum. String Processing examples. Lists: List operations-multiplication, concatenation, length, indexing, slicing, min, max, sum, membership operator; List functions-append, extend, remove, pop, count, index, insert, sort, reverse.	15th October to 31st October ,2022	Test 2
Unit-4	**Object Oriented Programming**: Introduction to Classes, Method, Class object, Instance object, Method object. Class as abstract data type, Date Class. Access attributes using functions-getattr, hasattr, setattr, delattr. Built-In Class Attributes of Class object (__dict__, __doc__ , __name__, module__).	1st November to 15th November, 2022	Assignment 2

Revision			Revision

Name of Teacher: Anil Kumar Class: BCA-II

Subject: Object Oriented Programming Using C++ Paper: BCA-PC(L)-231

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Introduction to C++, C++ Standard Library, Basics of a Typical C++ Environment, Header Files and Namespaces, Library files. Introduction to Objects and Object-Oriented Programming, Encapsulation, Access Modifiers; Controlling access to a class, method or variable (public, private, protected, package), Other Modifiers, Polymorphism; overloading, Inheritance, Overriding Methods, Abstract classes, Reusability.	16 August to 05 Sept.	Test
Unit-2	Classes and Data Abstraction: Introduction, Structure Definitions, Accessing Members of Structure, Class Scope and Accessing Class Members, Initializing Class Objects, Constructor, Using Default Arguments with Constructor, Using Destructor, Classes: Const (Constant) Object and Const Member Function, Object as Member of Classes, Friend Function and Friend class, Function Overloading. Operator Overloading: Introduction, Fundamentals of Operator Overloading, Restrictions on Operator Overloading, Operator Functions as Class Members vs. as Friend Function, Overloading, <> Overloading Unary Operators, Overloading Binary Operators.	06 Sept to 30 Sept	Test
Unit-3	Inheritance: Introduction, Inheritance: Base Classes and Derived Classes, Protected Members, Casting Base-Class Pointers to Derived-Class Pointer, Using Member Functions, Overriding Base-class members in a Derived class, Public, Protected, and Private Inheritance, Using Constructors and Destructors in Derived Classes, Implicit Derived-Class Object to Base-Class Object Conversion.	1Oct to 30 Oct	Assignment
Unit-4	**UNIT- IV** Virtual Functions and Polymorphism: Introduction to Virtual Functions, Abstract Base Classes and Concrete Classes, Polymorphism, New Classes and Dynamic Binding, Virtual Destructor, Polymorphism, Dynamic	01 Nov to 20 nov	Test

	Binding. File and I/O Streams: Files and Streams, Creating a Sequential Access File, Reading Data From A Sequential Access File, Updating Sequential Access File, Random Access File, Creating A Random Access File, Writing Data Randomly to a Random Access File, Reading Data Sequential from a Random Access File.		
Revision		21 Nov to 13 dec revision	Test

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Computer Science

Name of Teacher: Anil Kumar
Class: PGDCA
Subject: Operating System
Paper: PGDCA-103

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introductory Concepts: Operating systems functions and characteristics, operating system structure, operating system services, system calls, system programs. Types of Operating system: Batch operating system, Time-sharing operating system, Distributed operating system, Real time systems Process Management: Process concept, Process States, Process Control Block, Cooperating processes.	08 Oct 25 Oct.	
Unit-2	Unit II CPU scheduling: Levels of Scheduling, Scheduling criteria, Comparative study of scheduling algorithms, multiple processor scheduling. Concurrent Processes: Critical section problem, Semaphores, Classical process co-ordination problems and their solutions, Monitors, Inter-process Communications.	26 Oct to 15 Nov	Test
Unit-3	Deadlock: System model, Deadlock characterization, Methods for handling Deadlocks: Deadlock prevention, Deadlock avoidance, Deadlock detection, Recovery from Deadlock. Storage Management: Storage allocation methods: Single contiguous allocation, Multiple contiguous allocation, Paging; Segmentation combination of Paging and Segmentation, Virtual memory concepts, Demand Paging, Page replacement Algorithms, Thrashing.	16 Nov to 30 Dec	Assignment
Unit-4	Device and file management: Disk scheduling, Disk structure, Disk management, File Systems: Functions of the system, File access and allocation methods, Directory Systems: Structured Organizations, directory and file protection mechanisms. Case Studies: Comparative study of WINDOW, UNIX, ANDROID & LINUX system.	1 Jan to 10 Jan	Assignment
Revision		1 Jan to 13 Jan	Test

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Sushil Kumar Class: BCA-1st

Subject: COMPUTER AND PROGRAMMING FUNDAMENTALS Paper: **BCA-PC(L)-113**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Computer Fundamentals: Definition, Block Diagram along with its components, characteristics and classification of computers, Applications of computer in various fields. Memory: Concept of primary and secondary memory, RAM, ROM, types of ROM, flash memory, Secondary storage devices, Sequential and direct access devices, viz. magnetic tape, magnetic disk, CD, DVD.	26/08/2022-15/09/2022	
Unit-2	Computer hardware & software: I/O Devices, definition of software, relationship b/w hardware and software, types of software. Overview of operating system: Definition, functions of operating system, concept of multiprogramming, multi-tasking, multi-threading, multi-processing, time-sharing, real time, single user & multi-user operating system	16/09/2022-28/09/2022	
Unit-3	Planning the Computer Program: Concept of problem solving, Problem definition, Program design, Debugging, Types of errors in programming, Documentation. Techniques of problem solving: Flowcharting, algorithm, pseudo code, decision table, Structured programming concepts, Programming methodologies viz. top-down and bottom-up programming.	03/10/2022-21/10/2022	
Unit-4	Searching, Sorting & Merging: Linear and binary searching, Bubble, Selection and Insertion sorting. Computer Languages: Analogy with natural language, machine language, assembly language, high-level language, compiler, interpreter, assembler, characteristics of a good programming language. Computer Virus: Definition, Types of viruses, Characteristics of viruses, anti-virus software.	27/10/2022-10/11/2022	
Revision			

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Sushil Kumar Class: BA 5th sem

Subject: **Object Oriented Programming Using 'C++'** Paper: **BACS- 311**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Procedure Oriented Programming, Object-Oriented programming Paradigm, difference between Procedure Oriented Programming and Object-Oriented programming, Basic concepts of Object-Oriented programming, Benefits of OOP, Object Oriented Languages, and application of OOP. Structure of a C++ Program, Insertion operator, Extraction operator, Hierarchy of Console Stream Classes, Unformatted and Formatted I/O Operations, Manipulators, inline functions.	26/08/2022-15/09/2022	
Unit-2	C structure revisited, specifying a Class, Creating Objects, Defining member function, Memory allocation for objects, Scope resolution operator and its significance, Static Data Members, Static member functions, Friend Function, Friend Class.	16/09/2022-28/09/2022	
Unit-3	Dynamic Memory Management using new and delete Operator , Constructor, type of constructors, Dynamic initialization of objects, Constructor overloading, Constructor with default arguments, Destructors, function overloading, Operator Overloading, Overloading unary and binary operators.	03/10/2022-21/10/2022	
Unit-4	Inheritance, Single Inheritance, Making a private member inheritable, Multilevel Inheritance, Multiple Inheritance, Hierarchical Inheritance, Hybrid Inheritance, Virtual Base Class. Abstract Classes, Constructors in derived classes.	27/10/2022-07/11/2022	
Revision			

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Sushil Kumar Class: BA 5th sem

Subject: **DATA ANALYTICS'** Paper: **BACS- 312**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Data Analytics:** Introduction to Data Analytics, Business Intelligence (BI) for better decisions, Decision types, BI tools, BI skills, BI applications. **Data warehousing:** Introduction to Data warehousing (DW), Design considerations for DW, DW development approaches, DW architecture. **Data Mining:** Introduction to Data mining, Data cleaning and preparation, outputs of Data mining, evaluation of data mining results, Data Mining Techniques.	26/08/2022-26/09/2022	
Unit-2	**Decision Trees:** Introduction to Decision tree, Decision tree problem, Decision tree construction, Lessons from constructing trees, Decision tree algorithms. **Regression:** Introduction, Correlations and Relationships, Visual Look at Relationships, Logistic regression, Advantages and disadvantages of regression models. Artificial Neural Networks: Introduction, business applications of ANN, Design principles of an ANN, Representation of a neural network, Architecting a neural network, Developing an ANN, Advantages and disadvantages of using ANN	27/09/2022-28/10/2022	
Unit-3	**Cluster analysis:** Introduction, Applications of cluster analysis, Definition of a cluster, Representing clusters, Clustering techniques, K-means algorithm for clustering, Selecting the number of clusters. Association rule Mining: Introduction, Business applications of association rules, Representing association rules, Algorithms for association rule, Apriori algorithm, Creating association rules. **Web Mining:** Introduction, Web content mining, Web structure mining, Web usage mining, Web mining algorithms.	29/10/2022-21/11/2022	
Unit-4	**Naive-base analysis:** Introduction, Probability, Naïve base model, Text classification example. Support vector machines: Introduction, SVM model, The kernel method, Big data: Introduction, Defining big data, Big data landscape, Business implications of big data, Technology implications of big data, Big data technologies, Management of big data.	22/11/2022-03/12/2022	
Revision			

Name of Teacher: Naresh Kumar Class: BA 1st CS

Subject: **Programming in 'C'** Paper: **BACS – 112**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Introduction to C Programming:** History of C, Character Set, Identifiers and Keywords, Constants, Types of C Constants, Rules for Constructing Integer, Real and character Constants, Variables, Data Types, rules for constructing variables. Input/output: Unformatted & formatted I/O function, Input functions: scanf(), getch(), getche(), getchar(), gets(); output functions: printf(), putch(), putchar(), puts(). **Operators and Expressions:** Arithmetic, relational, logical, bitwise, unary, assignment, conditional operators and special operators, Type Conversion in Assignments, Hierarchy of Operations, Structure of a C program.	26/08/2022-15/09/2022	
Unit-2	**Decision Control Structure:** Decision making Decision making with IF statement, IF-ELSE statement, Nested IF statement, ELSE-IF ladder. **Loop Control Structure:** While and do-while, for loop and Nested for loop, **Case Control Structure:** Decision using switch; goto, break and continue statements. **Functions:** Library functions and user defined functions, Global and Local variables, Function Declaration, Calling and definition of function, Methods of parameter passing to functions, recursion, Storage Classes in C.	16/09/2022-28/09/2022	
Unit-3	**Arrays:** Introduction, Array declaration, Accessing values in an array, Initializing values in an array, Single and Two Dimensional Arrays, Initializing a 2-Dimensional Array, Passing array elements to a function: Call by value and call by reference, Arrays of characters, Insertion and deletion operations, Searching the elements in an array, Using matrices in arrays, Passing an Entire Array to a Function. **Pointers:** Pointer declaration, Address operator "&", Indirection operator "*", Pointer and arrays, Pointers	03/10/2022-21/10/2022	

	and 2-Dimensional Arrays, Pointer to an Array, Passing 2-D array to a Function, Array of Pointers. **Dynamic Memory Allocation:** malloc(), calloc(), realloc(), free() functions.		
Unit-4	**String Manipulation in C:** Declaring and Initializing string variables, Reading and writing strings, String Handling functions (strlen(), strcpy(), strcmp(), strcat(), strrev()). **Structures and Unions:** Declaration of structures, Structure Initialization, Accessing structure members, Arrays of structure, Nested structures, Structure with pointers, Union. **Files in C:** Introduction, Opening and Closing files, Basic I/O operation on files.	27/10/2022-10/11/2022	
Revision			

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Naresh Kumar — Class: BA 1st CS

Subject: **Fundamentals of Computer** — Paper: **BACS – 111**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Computer Fundamentals:** Introduction to Computers: Characteristics and Limitations of Computers, Evolution of Computers, Classification of Computers. Computer Languages. Computer Programs, Structured Programming Concepts	26/08/2022-15/09/2022	

	Basic Computer Organization: Units of a computer, CPU, ALU, Memory Hierarchy, Registers, I/O devices. Mother Board,		
Unit-2	**Word Processing:** Introduction to MS-Word, Creating & Editing: Formatting Document, Page, Table; Bookmark, Mail Merge, Macros. **Spread Sheets:** Introduction to MS-Excel, Creating & Editing Worksheet, Formatting data, Formulas and Functions, Creating Charts, Pivot Tables. **Power Point Presentations:** Creating, Manipulating & Enhancing Slides, Organizational Charts, Animations & Sounds, Inserting Animated Pictures.	16/09/2022-28/09/2022	
Unit-3	**Operating Systems:** Introduction to Operating System: Functions of Operating System, Services; Properties: Batch Processing, Multitasking, Multiprogramming, Interactivity, Distributed environment, Spooling; **Types of Operating System:** Single user and Multiuser, Batch OS, Multiprogramming OS, Multitasking OS, Real-Time OS, Time-Sharing OS, Distributed OS, Network OS	03/10/2022-21/10/2022	
Unit-4	**Internet Basics:** History of Internet, Web Browsers, Web Servers, Hypertext Transfer Protocol, Internet Protocols Addressing, Internet Connection Types, How Internet Works, ISPs, Search Engines, Emails and Its Working, Internet Security, Uses of Internet, Computer Networks and their advantages, Types of Computer Network, Network Topologies, Basics of Transmission Media. Cloud Computing Basics: Overview, Applications, Intranets and the Cloud. Benefits, Limitations and Security concern.	27/10/2022-15/11/2022	
Revision			

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Even Semester 2022-23

Department: Computer Science

Name of Teacher: Naresh Kumar | Class: BCA -3rd

Subject: **CLOUD COMPUTING** | Paper: **BCA-PE(L)-353**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Cloud Computing: Introduction to client server computing, Peer to Peer computing, Distributed computing, collaborative computing and cloud computing, Importance of cloud computing in current era, Characteristics, advantages and disadvantages of cloud computing.	26/08/2022-15/09/2022	
Unit-2	Cloud Services: Functioning of cloud computing, Classification of cloud on the basis of services: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (Iaas): Definition, characteristics and their benefits.	16/09/2022-28/09/2022	
Unit-3		03/10/2022-21/10/2022	

	Cloud Architecture: Cloud computing Logical and service architecture, Types of clouds: Private cloud, Public cloud and Hybrid cloud, Comparison of a Private, public and hybrid clouds, Migrating to a cloud, Seven step model to migrate		
Unit-4	Applications: Business opportunities using cloud, Managing Desktop and devices in cloud, cloud as a type of distributed infrastructure, Application of cloud computing for centralizing Email communication, collaboration on schedules, calendars. Overview of major cloud service providers - Amazon Ec2, Google App Engine.	27/10/2022-10/11/2022	
Revision			

Name : Sat kumar

Semester : 3rd Subject: computer Science Paper : Operating System

Unit	*Description*	*Duration*	*Assignment*
Unit 1	Structure of Operating Systems; Running Multiple Operating Systems, Running a Virtual Operating System, Operating System Modes, System Boot. Process Management,CPU Scheduling, Scheduling Algorithms, Purpose of a Scheduling algorithms, Introduction to FCFS, Shortest Job First (SJF), Shortest Job First (SJF),Round Robin Scheduling Algorithms.	4th week of Oct to 2nd Week of Nov.	
Unit 2	Memory Management: Fixed and Dynamic partition, Physical and Logical Address Space, Page Table, Mapping from page table to main memory, Page Table Entry, Size of the page tableVirtual Memory Concepts, Segmentation, Translation of Logical address into physical address by segment table. Paging VS Segmentation.	2nd week of Nov to3rd of Nov.	Assignment in 2nd week of Nov.
Unit 3	File Management: Attributes of File, Operations on File; File Access Methods-Sequential, Direct and Indexed Access; Directory Structure, File Systems, File System Structure- different layers; Master Boot Record, Directory Implementation-Linear List and Hash Table; Disk space Allocation MethodsContiguous Allocation and FAT.	4th week of Nov.	Minor test in the last week of Nov.

Unit 4	Shell introduction and Shell Scripting; Different modes of operation in vi editor; Shell script, Writing and executing the shell script; System calls, Pipes and Filters, Decision making in Shell Scripts (If else, switch), Loops in shell, Utility programs (cut, paste, join, tr , uniq utilities), Pattern matching utility (grep)	1st week of Dec.	
Revision		Dec.	

Name : Sat kumar

Semester : 3rd Subject: computer Science Paper : DBMS

Unit	*Description*	*Duration*	*Assignment*
Unit 1	Basic Concepts: A Historical perspective, File Systems vs. DBMS, Characteristics of the Data Base Approach, Abstraction and Data Integration, Database users, Advantages and Disadvantages of DBMS, DBMS architecture, Data Models, Schemas and Instances, Data Independence	3rd week of August to 1st week of sept.	
Unit 2	Entity Relationship (ER) Model: Basic Concepts-Entity, Attributes, Types of Attributes, Entity set and Keys; Relationships-Relationship set, Degree of Relationship, Mapping Cardinalities. ER diagram representation-Representation of Entity, Attributes and Relationship. Binary Representation and Cardinality, Participation Constraints.	2nd week of Sept. to3rd of Sept.	Assignment in 2nd week of Oct.
Unit 3	Relational Model : Relational model concepts (Tables, Tuple, Relation instance, Relation schema, Relation key, Attribute domain), Constraints- Key constraints, Domain constraints, Referential integrity constraints;Relational algebra, Basic operations: Select,Project,Union,Set differennce,Cartesian product,Rename.	4th week of Sept to 1st week of Oct.	
Unit 4	Relational Database design: Mapping ER model to relational database, functional dependencies, Lossless decomposition, Desirable properties of decomposition, Normal forms (1 NF, 2 NF, 3 NF and BCNF).	2nd week of Oct to 3rd week of Oct.	Minor test in the last week of Nov.
Revision		Dec.	

Name : Sat kumar

Semester : 5th Subject: computer Science Paper : Software Engineering

Unit	*Description*	*Duration*	*Assignment*
Unit 1	Software Crisis – problem and causes, Software life cycle models:Waterfall, Prototype, Evolutionary and Spiral models. Software Project Planning: Cost estimation: COCOMO model, Project scheduling, project monitoring.	**3rd week of August to 1st week of sept.**	
Unit 2	Software Requirement Analysis and Specifications: Structured Analysis, Data Flow Diagram, Data Dictionaries, Software Requirement and Specifications, Behavioral and non-behavioral requirements. Software Design: Design fundamentals, problem partitioning and abstraction, design methodology, Cohesion & Coupling, Classification of Cohesiveness & Coupling.	2nd week of Sept. to4th of Sept.	Ist Assignment in 2nd week of Oct.
Unit 3	Software Configuration Management, Quality Assurance, Risk Management, Software Maintenance:Type of maintenance, Management of maintenance..	1st week of Oct. to 4th week of Oct.	2nd Assignement in the 3rd week of Nov.
Unit 4	Coding: Programming style, structured programming. Software testing: Testing fundamentals, Functional testing: Boundary Value Analysis, Equivalence class testing, Decision table testing, Cause effect graphing, Software testing strategies:Unit testing,integration testing, validation testing, System testing, Alpha and Beta testing**.**	1st week of Nov to 3rd week of Nov.	Minor test in the last week of Nov.
Revision		4th week of Nov. to till Exam	

Department of Mathematics

Name of Teacher: Ankur Bala Class: B.Com 1st
Subject: Business Mathematics Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	CHAPTER-1,Chapter-2 Chapter -3	3rd week of aug to 2nd week of sept	
Unit-2	Linear Equations in two variables	3rd week of sept to 1st week of oct	Unit 1st test
Unit-3	Linear Programming	2nd week of nov to 4th week of nov	Unit 2nd test
Unit-4	Logarithm and Permutations and Combinations	2nd week of oct to 1st week of nov	Assignment of unit 3rd
Revision	2nd week of dec to till exam		

Name of Teacher: Ankur Bala Class: Ba 1st
Subject: Calculus Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability. Successive differentiation. Leibnitz theorem. Maclaurin and Taylor series expansions.	3rd week of aug to 3rd week of sept	

Unit-2	Asymptotes in Cartesian coordinates, intersection of curve and its asymptotes, asymptotes in polar coordinates. Curvature, radius of curvature for Cartesian curves, parametric curves, polar curves. Newton's method. Radius of curvature for pedal curves. Tangential polar equations. Centre of curvature. Circle of curvature. Chord of curvature, evolutes. Tests for concavity and convexity. Points of inflexion. Multiple points. Cusps, nodes & conjugate points. Type of cusps.	4th week of sept to 2nd week of oct	Unit 1st test
Unit-3	Tracing of curves in Cartesian, parametric and polar co-ordinates. Reduction formulae. Rectification, intrinsic equations of curve.	3rd week of oct to 2nd week of nov	Unit 2nd test
Unit-4	Quadrature (area) Sectorial area. Area bounded by closed curves. Volumes and Surfaces of solids of revolution. Theorems of Pappu's and Guilden.	3rd week of nov to 1st week of dec	Assignment of unit 3rd
Revision	2nd week of dec to till exam		

Name of Teacher: Ankur Bala Class: Bsc 2nd

Subject: Numerical Analysis Paper:

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Finite Differences operators and their relations. Finding the missing terms and effect of error in a difference tabular values, Interpolation with equal intervals: Newton's forward and Newton's backward interpolation formulae. Interpolation with unequal intervals:	3rd week of aug to 2nd week of sept	

	Newton's divided difference, Lagrange's Interpolation formulae.		
Unit-2	Central Differences: Gauss forward and Gauss's backward interpolation formulae, Sterling, Bessel Formula. Numerical Differentiation: Derivative of a function using interpolation formulae as studied in Sections –I & II. Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's one- third and three-eighth rule, Chebychev formula, Gauss Quadrature formula.	3rd week of sept to 1st week of oct	Unit 1st test
Unit-3	Solution of Algebraic and Transcendental equations. Simultaneous Linear Algebraic Equations.	2nd week of oct to 2nd week of nov	Unit 2nd test
Unit-4	Eigen Value Problems: Power method, Jacobi's method, Given's method, House- Holder's method. Numerical solution of ordinary differential equations: Single step methods-Picard's method, Euler's method, modified euler's method, R-K method. Multi-step method: Predictor-Corrector method, Milne simpson's method,Picard's method. Taylor's series method, Euler's method, Runge-Kutta Methods. Multiple step methods; Predictor-corrector method, Modified Euler's method, Milne-Simpson's method.	3rd week of nov to 4th week of nov	Assignment of unit 3rd
Revision	1st week of dec to till exam		

Name of Teacher: Ankur Bala Class: Bsc 3rd
Subject: Number Theory and Trigonometry Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-3	Exponential, Logarithmic, Circular functions; sin(nx), cos(nx), tan(nx), sin"x, cos"x, tan"x, hyperbolic and inverse hyperbolic functions - simple problems. Gregory's series, Summation of Trigonometric series, Trigonometric expansions of sine and cosine as infinite products (without proof).	3rd week of aug to 1st week of nov week	Assignment
Unit-4	Order of an integer modulo n, primitive roots for primes, composite numbers having primitive roots, Euler's criterion, the Legendre symbol and its properties, quadratic reciprocity, quadratic congruences with composite moduli	2nd week of nov to 1st week of dec	Test
Revision	2nd week of dec to till exam		

Name of Teacher: Ankur Bala Class: Bsc 3rd Hons
Subject: Real Analysis Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Riemann integral, Integrabililty of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.	3rd week of aug to 2nd week of sept	
Unit-2	Improper integrals and their convergence, Comparison tests, Abel's and Dirichlet's tests, Frullani's integral, Integral as a function of a parameter. Continuity, Differentiability and	3rd week of sept to 1st week of oct	Unit 1st test

	integrability of an integral of a function of a parameter.		
Unit-3	Definition and examples of metric spaces, neighborhoods, limit points, interior points, open and closed sets, closure and interior, boundary points, subspace of a metric space, equivalent metrics, Cauchy sequences, completeness, Cantor's intersection theorem, Baire's category theorem, contraction Principle	2nd week of oct to 2nd week of nov	Unit 2nd test
Unit-4	Continuous functions, uniform continuity, compactness for metric spaces, sequential compactness, Bolzano-Weierstrass property, total boundedness, finite intersection property, continuity in relation with compactness, connectedness , components, continuity in relation with connectedness.	3rd week of nov to 4th week of nov	Assignment of unit 3rd
Revision	1st week of dec to till exam		

Department: Mathematics

Name of Teacher: Sandeep Kumar Class: B.A. 1st

Subject: Practical Paper: Mathematics lab-I

Program	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
1	1. Program to Calculate Simple Interest 2. Program to Calculate Compound Interest	25 August 2022 to 20 September 2022	

	3. Program to Calculate Arithmetic mean of three numbers 4. Program to calculate area of triangle by Heron's Formula		
2	5. Program to calculate area and perimeter of a circle 6. Program to check whether the number is odd or even 7. Program to find the roots of a quadratic equation 8. Program to calculate greatest of three numbers	21 September 2022 to 20 October 2022	
3	9. Program to reverse the digits of a positive number 10. Program to convert decimal to binary 11. Program to generate first n prime numbers. 12. Program to check a year Leap or not. 13. Program to find the sum of first n natural numbers	21 October 2022 to 20 November 2022	
4	14. Program to find sum of first n terms of an AP 15. Program to find sum of first n terms of a GP. 16. Program to generate a pyramid 17Program to find simple interest using switch statement. 18 Program to prepare electricity Bill	21 November 2022 to 20 December 2022	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-2023 B.A. 2nd

Name of Teacher : Sandeep kumar

Semester: 3. Subject: Mathematics Paper: Numerical analysis

Class : **B.Sc 3rdSemester** Subject:Unit 1	Finite Differences operators and their relations. Finding the missing terms and effect of	3rd week of august to	Verbly test

	error in a difference tabular values, Interpolation with equal intervals: Newton's forward and Newton's backward interpolation formulae. Interpolation with unequal intervals: Newton's divided difference, Lagrange's Interpolation formulae, Hermite Formula.	1th week of September 2022	
Unit 2	Central Differences: Gauss forward and Gauss's backward interpolation formulae, Sterling, Bessel Formula. Probability distribution of random variables, Binomial distribution, Poisson's distribution, Normal distribution: Mean, Variance and Fitting.	2st week of September to 4th week of September	
Unit 3	Numerical Differentiation: Derivative of a function using interpolation formulae as studied in Sections –I & II. Eigen Value Problems: Power method, Jacobi's method, Given's method, House- Holder's method, QR method, Lanczos method. SECTION-I	Ist week of october to Ist week of november	
Unit 4	Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's one- third and three-eighth rule, Chebychev formula, Gauss Quadrature formula. Numerical solution of ordinary differential equations: Single step methods- Picard's method. Taylor's series method, Euler's method, Runge-Kutta Methods. Multiple step methods; Predictor-corrector method, Modified Euler's method,	2nd week of November to 3rd week of november	1nd Assignement in the last Week of september Minor test in the last week of november

	Milne-Simpson's method.		
Revision		Last week of november	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Sandeep Kumar class : **B.Sc 1st Semester**

Subject: **Agebra** Paper : **BM-111**

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test**
Unit 1	Symmetric, skew symmetric,hermition and skew hermition matrices, elementary operation on matrices. Rank of matrix.inverse of matrix,linerae	3rd week of Aug to 4th week of Aug	Verbly test

	dependence and independence of rows and colums of matrices,row rank and column rank of matrices,eigen values,eigen vectors and characterstic equation of matrix, minimal polynomialof matrix, cayley Hamilton theorem and its use to finding inverse		
Unit 2	Application of matrices to a system of linear equation,theorem of consistency of a system of linear equation,unitae=ry and orthogonal matrices,bilinear and quaradic forms.	Istweek of september to 3rd week of September	
Unit 3	Relations between roots and coefficients of general polynomial equation in one variable,solution of polynomial equations having condition of roots. Transformation of equations,common roots and multiple roots.	4th week of September to 1th week of November 2022	Ist Assignment inlast week of september
Unit 4	Nature of roots of an equation. Descarte rule of sign,solution of cubic equation, biquaadratic equations and their solutions.	2st week of November to 3rd week of november	2nd Assignement in the last week of November Test last week of November
Revision		Last week of November and 1st week of december	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Sandeep Kumar class : **B.A. 1st Semester**

Subject: **Agebra** Paper : **BM-111**

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test**
Unit 1	Symmetric, skew symmetric,hermition and skew hermition matrices,	3rd week of Aug to	Verbly test

	elementary operation on matrices. Rank of matrix.inverse of matrix,linerae dependence and independence of rows and colums of matrices,row rank and column rank of matrices,eigen values,eigen vectors and characterstic equation of matrix, minimal polynomialof matrix, cayley Hamilton theorem and its use to finding inverse	4th week of Aug	
Unit 2	Application of matrices to a system of linear equation,theorem of consistency of a system of linear equation,unitae=ry and orthogonal matrices,bilinear and quaradic forms.	Ist week of september to 3rd week of September	
Unit 3	Relations between roots and coefficients of general polynomial equation in one variable,solution of polynomial equations having condition of roots. Transformation of equations,common roots and multiple roots.	4th week of September to 1th week of November 2022	Ist Assignment inlast week of september
Unit 4	Nature of roots of an equation. Descarte rule of sign,solution of cubic equation, biquaadratic equations and their solutions.	2st week of November to 3rd week of november	2nd Assignement in the last week of November Test in last week
Revision		Last week of November and 1st week of december	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Sandeep Kumar class : **B.A. 5th Semester**

Subject: **Sequences and Series**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Set, Finite set, Infinite Set, Boundedness g.l.b, l.u.b, examples	3rd week of Aug to	Verbly test

	Neighbourhood of a point, Examples, open sets Interior point of a set, isolated point Limit point of a set, examples Thorems related to limit points, Derived set and related results .Properties of limit points, Closed sets, closure of a set and related results Examples , B.W.T and compactness B.W.T related results and examples Open Cover , Heine Borel Theorm Definition of sequence, examples, type of sequences, real sequennce , to find general term of sequnce , range of sequ Convergence and divergence of a sequnce, related results, examples Bounded sequnces, Monotone sequnces Monotone convergence theorems, Cauchy sequnce, Cauchy Criterion , Examples and problems	2th week of September 2022	
Unit 2	Infinite series : Comparison Test-1, II Problems and solution and application Cauchy Test for series and related results and problems Geomertics series test problems and solution Harmonic series and p-test , related problems and solution exercise Ratio test - Problems and solutions Raabe's Test- Problems and solutions Logrithmic Test- Problems and solutions Demorgan and Bertrand Test- Problems and solutions	3stweek of september to 1st week of october	
Unit 3	Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Co-efficients, Dirichlet's conditions, Parseval's identity for Fourier series, Fourier series for even and odd functions, Half range series, Change of Intervals.	2nd week of September to 4th week of October	Ist Assignment inlast week of september
Unit 4	Riemann integral, Integrabililty of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.	1st week of November to 3rd week of november	2nd Assignement in the last week of November Test in last week of september
Revision		Last week of November and	

		1st week of december	

Department: Mathematics

Name of Teacher: Dr. Amit Kumar Class: B.Sc. III (H) Maths

Subject: Programming in C and Numerical Methods Paper: BML 503

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Programmer's model of a computer, Algorithms, Flow charts, Data types, Operators and expressions, Input / Output functions.	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	Decisions control structure: Decision statements, Logical and conditional statements, Implementation of Loops, Switch Statement & Case control structures. Functions, Preprocessors and Arrays.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters. Structures: Definition, using Structures, use of Structures in Arrays and Arrays in Structures. Pointers: Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, Newton-Raphson's method. Newton's iterative method for finding pth root of a number.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Simultaneous linear algebraic equations: Gauss-elimination method, Gauss-Jordan method, Triangularization method (LU decomposition method). Crout's method, Cholesky Decomposition method. Iterative method, Jacobi's method, Gauss-Seidal's method, Relaxation method.	27 October 2022 to 19 November 2022	
Revision	Unit 1, Unit II, Unit III and Unit IV	21 November 2022 to 7 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2022-23

Department: Mathematics

Name of Teacher: Amit Kumar Class: B.Sc. I(NM)

Subject: Practical Paper: Mathematics lab-I

Program	Description of Chapter / Topics	Duration	Assignment / Test
1	1. Program to Calculate Simple Interest 2. Program to Calculate Compound Interest 3. Program to Calculate Arithmetic mean of three numbers 4. Program to calculate area of triangle by Heron's Formula	25 August 2022 to 20 September 2022	
2	5. Program to calculate area and perimeter of a circle 6. Program to check whether the number is odd or even 7. Program to find the roots of a quadratic equation 8. Program to calculate greatest of three numbers	21 September 2022 to 20 October 2022	
3	9. Program to reverse the digits of a positive number 10. Program to convert decimal to binary 11. Program to generate first n prime numbers. 12. Program to check a year Leap or not. 13. Program to find the sum of first n natural numbers	21 October 2022 to 20 November 2022	
4	14. Program to find sum of first n terms of an AP 15. Program to find sum of first n terms of a GP. 16. Program to generate a pyramid 17Program to find simple interest using switch statement. 18 Program to prepare electricity Bill	21 November 2022 to 20 December 2022	

Lesson Plan
Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: Mathematics

Name of Teacher: Dr. Amit Kumar Class: B.Sc. III (NM)

Subject: Number theory and trigonometry Paper: CML 508(I)

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Linear Diophantine equation, prime counting function, statement of prime number theorem, Gold Bach Conjecture. Linear congruence, complete set of residues, Fermat's theorem. Chinese Remainder Theorem Wilson's theorem and its converse.	16 August 2022 to 30 September 2022	1st assignment in the last week of September
Unit-2	Number theoretic functions, Sum and number of divisors, totally multiplicative theorem, and Mobius inversion formula. The greatest integer function, Euler 'phi function , Euler theorem , RRS, Some properties of Euler Phi Function	1 October 2022 to to 19 November 2022	1st in the First Week of October
Revision	Unit-1 to Unit-2	21 November 2022 to 7 December 2022	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: Mathematics

Name of Teacher: Dr. Amit Kumar Class: B.A. II

Subject: Advanced Calculus Paper: BAMH-201

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions & implicit functions. Change of variables. Homogenous functions & Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Differentiability of real valued functions of two variables. Schwarz and Young's Theorem. Implicit function theorem. Maxima, Minima and saddle points of two Variables. Lagrange's method of multipliers.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Jacobians, Beta and Gama functions Double and Triple integrals, Dirichlets integrals, change of order of integration in double integrals.	27 October 2022 to 19 November 2022	
Revision	Unit-1 to Unit-4	21 November 2022 to 7 December 2022	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: Mathematics

Name of Teacher: Dr. Amit Kumar Class: B.Sc. II Subject: Practical Paper: Mathematics Lab IV

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1. To interpolate the data using Newton's forward interpolation formula 2. To interpolate the data using Newton's backward interpolation formula Programme	16 August 2022 to 10 September 2022	
Unit-2	3. To interpolate the data using Gauss's forward interpolation formula 4. To interpolate the data using Gauss's backward interpolation formula	12 September 2022 to 30 September 2022	
Unit-3	5. To interpolate the data using Lagrange's interpolation formula 6. To find the roots of algebraic and transcendental equations using Bisection method.	1 October 2022 to 21 October 2022	
Unit-4	7. To find the roots of algebraic and transcendental equations using Regula-Falsi method 8. To find the roots of algebraic and transcendental equations using Secant method. 9. To find the roots of algebraic and transcendental equations using Newton-Raphson's method.	27 October 2022 to 19 November 2022	

Name of Teacher: Santosh Devi Class: B.Sc. II (H) Maths

Subject: Vector Calculus Paper: BML 304

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors. Vector differentiation. Scalar Valued point functions, vector valued point functions, derivative along a curve, directional derivatives Section – II.	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	Gradient of a scalar point function, geometrical interpretation of grad Φ , character of gradient as a point function. Divergence and curl of vector point function, characters of Div f ρ and Curl f ρ as point function, examples. Gradient, divergence and curl of sums and product and their related vector identities. Laplacian operator.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Orthogonal curvilinear coordinates Conditions for orthogonality fundamental triad of mutually orthogonal unit vectors. Gradient, Divergence, Curl and Laplacian operators in terms of orthogonal	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October

	curvilinear coordinates, Cylindrical co-ordinates and Spherical coordinates.		
Unit-4	Vector integration; Line integral, Surface integral, Volume integral. Theorems of Gauss, Green & Stokes and problems based on these theorems.	27 October 2022 to 19 November 2022	
Revision	Unit 1, Unit II, Unit III and Unit IV	21 November 2022 to 7 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Santosh Devi Class: B.Sc. I(NM)

Subject: Practical Paper: Mathematics lab-I

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1. Program to Calculate Simple Interest 2. Program to Calculate Compound Interest 3. Program to Calculate Arithmetic mean of three numbers 4. Program to calculate area of triangle by Heron's Formula	29 August 2022 to 20 September 2022	
Unit-2	5. Program to calculate area and perimeter of a circle 6. Program to check whether the number is odd or even 7. Program to find the roots of a quadratic equation 8. Program to calculate greatest of three numbers	21 September 2022 to 20 October 2022	
Unit-3	9. Program to reverse the digits of a positive number 10. Program to convert decimal to binary 11. Program to generate first n prime numbers. 12. Program to check a year Leap or not. 13. Program to find the sum of first n natural numbers	21 October 2022 to 25 November 2022	
Unit-4	14. Program to find sum of first n terms of an AP 15. Program to find sum of first n terms of a GP.	26 November	

	16. Program to generate a pyramid 17Program to find simple interest using switch statement. 18 Program to prepare electricity Bill	2022 to 20 December 2022	
Revision	All Programs	21 December 2022 to 26 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Santosh Devi — Class: B.Sc. II(Hons.)

Subject: Special functions 1 — Paper: BML 306

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Series solution of differential equations – Power series method, Definitions of Beta and Gamma functions. Bessel equation and its solution: Bessel functions and their propertiesConvergence, recurrence, Relations and generating functions, Orthogonality of Bessel functions.	16 August 2022 to 30 September 2022	1st assignment in the last week of September
Unit-2	FunctionLegendre and Hermite differentials equations and their solutions: Legendre and Hermite functions and their properties-Recurrence Relations and generating functions. Orhogonality of Legendre and Hermite polynomials. Rodrigues' Formula for Legendre & Hermite Polynomials, Laplace Integral Representation of Legendre polynomial.	1 October 2022 to to 25 November 2022	2nd Assignment in the First Week of October
Revision	Unit-1 to Unit-2	25 November 2022 to 7 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Santosh Devi Class: B.A. II

Subject: Practical Paper: BAMH (P) 203

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1. To interpolate the data using Newton's forward interpolation formula 2. To interpolate the data using Newton's backward interpolation formula Programme	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	3. To interpolate the data using Gauss's forward interpolation formula 4. To interpolate the data using Gauss's backward interpolation formula	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	5. To interpolate the data using Lagrange's interpolation formula 6. To find the roots of algebraic and transcendental equations using Bisection method.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	7. To find the roots of algebraic and transcendental equations using Regula-Falsi method	27 October 2022 to 19	

	8. To find the roots of algebraic and transcendental equations using Secant method. 9. To find the roots of algebraic and transcendental equations using Newton-Raphson's method.	November 2022	
Revision	Unit-1 to Unit-4	21 November 2022 to 7 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Santosh Devi Class: BSc(IIIHons.)

Subject: Practical Paper: BMP504

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1. Generate first n prime numbers. 2. Calculate the compound interest. 3. Computhe the value of pie from the series. 4. Solve a quadratic equation. 5. Swap two numbers using pointers	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	6. Count number of vowls and consonants in a sentence. 7. Pattern matching of two string. 8. Reverse a string character by character and word by word. 9. Encryption and decryption of a string. 10. Find the GCD of two integer and use it to find the GCD of three integers using Functions. 11. Calculate ate area and parameter of a circle using function call by reference.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September

Unit-3	12. Generate first n Fibonacci terms using recursion. 13. Transpose of a matrix. 14. Multiplication of matrix m*n by n*p using functions. 15. Bisection method. 16. Regula Falsi method.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	17. Newton Raphson method. 18. Gauss elimination method. 19. Gauss Siedal method. 20. Gauss Jordan method. 21. Crout's method.	27 October 2022 to 19 November 2022	
Revision	Unit-1 to Unit-4	21 November 2022 to 7 December 2022	

Name of Teacher : Mr. Dhanesh kumar

Class: B.Sc 2nd (H) 3rd semester

Semester: 3 Subject: Mathematics Paper: Advanced Calculus

Subject:Unit 1	Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.	3rd week of Aug to 4th week of Aug	Verbly test
Unit 2	Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions & implicit functions. Change of variables. Homogenous functions & Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.	Istweek of september to 3rd week of September	Ist Assignment in 2nd week of august
Unit 3	Differentiability of real valued functions of two variables. Schwarz and Young's theorem. Implicit function theorem. Maxima, Minima and saddle points of two variables. Lagrange's method of multipliers.	4th week of September to 4th week of October	Minor test in the last week of september

Unit 4	Curves: Tangents, Principal normals, Binormals, Serret-Frenet formulae. Locus of the centre of curvature, Spherical curvature, Locus of centre of Spherical curvature, Involutes, evolutes, Bertrand Curves. Surfaces: Tangent planes, one parameter family of surfaces, Envelopes.	1st week of November to 3rd week of november	2nd Assignement in the last week of October
Revision		Last week of November and 1st week of december	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Dhanesh kumar class : **B.Sc 1st (H) Semester**

Subject: **Agebra** Paper : **BM-111**

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test**
Unit 1	Symmetric, skew symmetric,hermition and skew hermition matrices, elementary operation on matrices. Rank of matrix.inverse of matrix,linerae dependence and independence of rows and colums of matrices,row rank and column rank of matrices,eigen values,eigen vectors and characterstic equation of matrix, minimal polynomialof matrix, cayley Hamilton theorem and its use to finding inverse	3rd week of Aug to 4th week of Aug	Verbly test
Unit 2	Application of matrices to a system of linear equation,theorem of consistency of a system of linear equation,unitae=ry and orthogonal matrices,bilinear and quaradic forms.	Istweek of september to 3rd week of September	
Unit 3	Relations between roots and coefficients of general polynomial equation in one variable,solution of polynomial equations having condition of roots.	4th week of September to 4th week of October	Ist Assignment inlast week of september

	Transformation of equations,common roots and multiple roots.		
Unit 4	Nature of roots of an equation. Descarte rule of sign,solution of cubic equation, biquaadratic equations and their solutions.	1st week of November to 3rd week of november	2nd Assignement in the last week of november
Revision		Last week of November and 1st week of december	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Dhanesh kumar class : **B.Sc (H) 3rd Semester**

Subject: Ordinary Differntial Equation

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Exact Differential Equations . Equations of First Order but not of First Degree	3rd week of Aug to 4th week of aug	Verbly test
Unit 2	Exact Differential Equations . Equations of First Order but not of First Degree	Istweek of September to 4th week of September	
Unit 3	Homogenous Linear Equations . Linear Differential Equations of Second order	Ist week of october to Ist week of november	Ist Assignment inlast week of september
Unit 4	Ordinary Simultaneous Differential Equations. Total Differential Equations	2nd week of November to 3rd week of november	2nd Assignement in the last week of november
Revision		Last week of November and 1st week of december	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Dhanesh kumar class : **B.Sc (H) 5th Semester**

Subject: **Sequences and Series**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Set, Finite set, Infinite Set, Boundedness g.l.b, l.u.b, examples Neighbourhood of a point, Examples, open sets Interior point of a set, isolated point Limit point of a set, examples Thorems related to limit points, Derived set and related results .Properties of limit points, Closed sets, closure of a set and related results Examples , B.W.T and compactness B.W.T related results and examples Open Cover , Heine Borel Theorm	3rd week of Aug to 4th week of Aug	Verbly test
Unit 2	Definition of sequence, examples, type of sequences, real sequennce , to find general term of sequnce , range of sequ Convergence and divergence of a sequnce, related results, examples Bounded sequnces, Monotone sequnces Monotone convergence theorems, Cauchy sequnce, Cauchy Criterion , Examples and problems Comparison Test-1, II Problems and solution and application Cauchy Test for series and related results and problems Geomertics series test problems and solution Harmonic series and p-test	Ist week of september to 3rd week of September	
Unit 3	Infinite Series:-related problems and solution exercise Ratio test - Problems and solutions Raabe's Test- Problems and solutions Logrithmic Test- Problems and solutions Demorgan and Bertrand Test- Problems and solutions Cauchy Root test - Problems and solutions Guass Test- Problems and solutions Integral Test- Problems and solutions	4th week of September to 4th week of October	Ist Assignment inlast week of september

	Condensation Test Problems and solutions		
Unit 4	Alternate series- definition , Examples Leibnitz Test- Problems and solutions Absolute Convergence- Problems and solutions Arbitrary Series- Definition and examples Abel's lemma- Problems and solutions Dirichlet' test- Problems and solutions Test for convergence of rearrangement of series- Riemann test Multiplication of series, Cauchy product of series, convergence of infinite product Absolute Convergence of infinite products- Problems and solutions	1st week of November to 3rd week of november	2nd Assignement in the last week of november
Revision		Last week of November and 1st week of december	

Name of Teacher:Manish Gautam Class:B.Sc. 2 hons.

Subject:Mathematics Paper:Mathematical Statistics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Measures of Central Tendency and Location: Mean, median, mode, geometric mean, harmonic mean, partition values.	16/08/2022to 10/09/2022	

	Measures of Dispersion: Absolute and relative measures of range, quartile deviation, mean deviation, standard deviation (σ), coefficient of variation.		
Unit-2	Measures of Central Tendency and Location: Mean, median, mode, geometric mean, harmonic mean, partition values. Measures of Dispersion: Absolute and relative measures of range, quartile deviation, mean deviation, standard deviation (σ), coefficient of variation.	11/09/2022to 05/10/2022	
Unit-3		06/10/2022to 30/10/2022	

	Basic concepts in Probability, Bayes' theorem and its applications. Random Variable and Probability Functions: Definition and properties of random variables, discrete and continuous random variable, probability mass and density functions, distribution function.		
Unit-4	Correlation for Bivariate Data: Concept and types of correlation, Scatter diagram, Karl Pearson Coefficient (r) of correlation and rank correlation coefficient. Linear Regression: Concept of regression, principle of least squares and fitting of straight	31/10/2022to 30/11/2022	02/11/2022

	line, derivation of two lines of regression, properties of regression coefficients, standard error of estimate obtained from regression line, correlation coefficient between observed and estimated values. Angle between two lines of regression. Difference between correlation and regression.		
Revision		01/12/2022	

Department: Mathematics

Name of Teacher: Dr. Rahmaan Khan
Subject: Mathematics

Class: B.Sc.III (H)
Paper: Operation Research -II

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Inventory Control: introduction of inventory, factors affecting inventory, Inventory models, Deterministic models: Economic order quantity model when shortages are allowed/not allowed, price discounts model, multi-item inventory models.	03-11-2022 to 20-11-2022	

Unit-2	Queuing Theory : Basic characteristics of queuing system, Birth-death equations, Steady state solution of Markovian queuing models with single and multiple servers with infinite capacity (M/M/1 and M/M/c), and with limited capacity (M/M/1/K and M/M/c/K).	16-08-2022 to 15-09-2022	
Unit-3	Sequencing problems: Processing of n jobs through 2 machines, n jobs through 3 machines, 2 jobs through m machines, n jobs through m machines. Replacement problems: Replacement of items whose running cost increases with time, Replacement policies for the items that fail completely – Individual and the group replacement policies.	21-11-2022 to 07-12-2022	
Unit-4	PERT and CPM: Introduction of PERT and CPM, Earliest and latest times, Determination of critical path and various types of floats, Probablistic and cost considerations in project scheduling	16-09-2022 to 31-10-2022	
Revision	Revision of the Syllabus	08-12-2022 to Exam	

Department: Mathematics

Name of Teacher: Dr. Rahmaan Khan
Class: B.A.III
Subject: Mathematics
Paper: Number Theory and Trigonometry

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Statement of Prime Number Theorem, Prime Counting Function, Complete set of residues, Linear Congruence, Fermat's theorem. Wilson's theorem,	16-08-2022 to 10-09-2022	

	Chinese Remainder Theorem. Linear Diophantine equations.		
Unit-2	Number Theoretic function, Euler's ϕ function, Some theorems on Euler's function, totally multiplicative function, Greatest integer function [x]. The number of divisors and the sum of divisors of a natural number n (The functions d(n) and □(n)). Moebius function and Moebius inversion formula.	11-09-2022 to 05-10-2022	
Unit-3	Order of an integer modulo n, primitive roots for primes, Composite numbers having primitive roots, Euler's criterion, Quadratic reciprocity, Quadratic congruences with composite moduli.	06-10-2022 to 31-10-2022	
Unit-4	Exponential, Logarithmic, Circular functions; sin(nx), cos(nx), tan(nx), sin^n(x), cos^n(x), tan^n(x), Hyperbolic functions and Inverse Hyperbolic functions: simple problems, Trigonometric functions of sine and cosine as infinite products (without proof).	03-11-2022 to 30-11-2022	
Revision	Revision of the Syllabus	01-12-2022 to Exam	

Name of Teacher: Dr. Rahmaan Khan Class: B.Sc.II (H)
Subject: Mathematics Paper: Number Theory and Trigonometry

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Divisibility, G.C.D.(greatest common divisors), L.C.M.(least common multiple) Primes, Fundamental Theorem of Arithemetic. Linear Congruences, Fermat's theorem. Wilson's theorem and its converse. Linear Diophanatine equations in two variables	16-08-2022 to 10-09-2022	

Unit-2	Complete residue system and reduced residue system modulo m. Euler's ϕ function Euler's generalization of Fermat's theorem. Chinese Remainder Theorem. Quadratic residues. Legendre symbols. Lemma of Gauss; Gauss reciprocity law. Greatest integer function [x]. The number of divisors and the sum of divisors of a natural number n (The functions d(n) and □(n)). Moebius function and Moebius inversion formula.	11-09-2022 to 05-10-2022	
Unit-3	De Moivre's Theorem and its Applications. Expansion of trigonometrical functions. Direct circular and hyperbolic functions and their properties.	06-10-2022 to 31-10-2022	
Unit-4	Inverse circular and hyperbolic functions and their properties. Logarithm of a complex quantity. Gregory's series. Summation of Trigonometry series.	03-11-2022 to 30-11-2022	
Revision	Revision of the Syllabus	01-12-2022 to Exam	

Name of Teacher: Dr. Rahmaan Khan
Class: B.Sc.III (H)
Subject: Mathematics
Paper: Groups and Rings

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset	16-08-2022 to 10-09-2022	

	decomposition, Largrage's theorem and its consequences, Normal subgroups, Quotient groups		
Unit-2	Homeomorphisms, isomophisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.	11-09-2022 to 05-10-2022	
Unit-3	Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.	06-10-2022 to 07-11-2022	
Unit-4	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is R[X1 , X2,……Xn]	09-11-2022 to 30-11-2022	
Revision	Revision of the Syllabus	01-12-2022 to Exam	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher:Manish Gautam Class: B.Sc.III Non medical.

Subject: Mathematics Paper: Groups and Rings

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Largrage's theorem and its consequences, Normal subgroups, Quotient groups	16-08-2022 to 10-09-2022	
Unit-2	Homeomorphisms, isomophisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.	11-09-2022 to 05-10-2022	
Unit-3	Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.	06-10-2022 to 15-11-2022	02/11/2022
Unit-4	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is R[X1 , X2,……Xn]	15-11-2022 to 30-11-2022	
Revision		01-12-2022 to	

	Revision of the Syllabus	Exam	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher:Manish Gautam Class: B.A.3rd year

Subject: Mathematics Paper: Groups and Rings

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Largrage's theorem and its consequences, Normal subgroups, Quotient groups	16-08-2022 to 10-09-2022	
Unit-2	Homeomorphisms, isomophisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.	11-09-2022 to 05-10-2022	
Unit-3	Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.	06-10-2022 to 07-11-2022	10/11/2022
Unit-4	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is R[X1 , X2,……Xn]	07-11-2022 to 30-11-2022	
Revision	Revision of the Syllabus	01-12-2022 to Exam	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department:Mathematics

Name of Teacher:Manish Gautam Class:B.C.A. 1 YEAR

Subject:Mathematics Paper:Mathematical Foundation

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Set, Subsets and operations on sets, Venn Diagram of Sets, Power set of a set. Equivalence relation on a set and partition of a set, Partially ordered sets. Boolean Algebra (definition and examples)	13/10/2022to 15/11/2022	

Unit-2	Basic properties of limits, Continuous functions and classifications of discontinuities, Derivative of a function, Derivatives of Logarithmic, Exponential, Trigonometric, Inverse Trigonometrically and hyperbolic functions. Higher order derivatives.	15/11/2022to 30/11/2022	
Unit-3		24/08/2022 to 18/09/2022	29/10/2022

	Addition and multiplication of matrices, Laws of matrix algebra, Singular and non-singular matrices, Inverse of a matrix, Rank of a matrix, Rank of the Product of two matrices, System of Linear equations i.e. AX=0 and AX=B		
Unit-4	Characteristic equations of a square matrix, Cayley-Hamilton Theorem, Eigenvalues and eigenvectors, Eigenvalues and eigenvectors of symmetric skew symmetric, Hermitian and skew- Hermitan matrices.	19/09/2022 to 12/10/2022	
Revision		01/12/2022	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Priyanka — Class: B.Sc.(NM) -1

Subject: Calculus — Paper: CML107

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Definition of the limit of a function. Basic properties of limits, Continuous functions and classification of discontinuities. Differentiability. Successive differentiation. Leibnitz theorem. Maclaurin and Taylor series expansions.	25 Aug., 2022 to 10 Sep., 2022	Test
Unit-2	Asymptotes in Cartesian coordinates, intersection of curve and its asymptotes, asymptotes in polar coordinates. Curvature, radius of curvature for Cartesian curves, parametric curves, polar curves. Newton's method. Radius of curvature for pedal curves. Tangential polar equations. Centre of curvature. Circle of curvature. Chord of curvature, evolutes. Tests for concavity and convexity. Points of inflexion. Multiple points. Cusps, nodes & conjugate points. Type of cusps	07 Oct, 2022 to 19 Nov., 2022	Assignment
Unit-3	Tracing of curves in Cartesian, parametric and polar co-ordinates. Reduction formulae. Rectification, intrinsic equations of curve.	12 Sept., 2022 to 6 Oct., 2022	Test
Unit-4	Quardrature (area)Sectorial area. Area bounded by closed curves. Volumes and surfaces of solids of revolution. Theorems of Pappu's and Guilden.	21 Nov., 2022 onwards	Test
Revision			

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Priyanka Class: B.Sc.(NM) -II

Subject: Advanced Calculus Paper: CML 306

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.	07 Oct, 2022 to 17 Nov., 2022	Test
Unit-2	Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions & implicit functions. Change of variables. Homogenous functions & Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.	17 Nov., 2022 onwards	Assignment
Unit-3	Differentiability of real valued functions of two variables. Schwarz and Young's theorems. Implicit function theorem. Maxima, Minima and saddle points of two variables. Lagrange's method of multipliers.	12 Sept., 2022 to 6 Oct., 2022	Test
Unit-4	Jacobians, Beta and Gama functions, Double and Triple integrals, Dirichlets integrals, change of order of integration in double integrals..	26 Aug., 2022 to 10 Sep., 2022	Test
Revision			

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Mathematics

Name of Teacher: Priyanka | Class: B.Sc.(NM) -II

Subject: : Sequence and Series | Paper: CML 507(i)

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Boundedness of the set of real numbers; least upper bound, greatest lower bound of a set, neighborhoods, interior points, isolated points, limit points, open sets, closed set, interior of a set, closure of a set in real numbers and their properties. Sequence: Real sequences and their convergence, theorem on limits of sequence, bounded and monotonic sequences, Cauchy's sequence, Cauchy general principle of convergence, subsequences, subsequential limits.	07 Oct, 2022 to 17 Nov., 2022	Assignment
Unit-2	Infinite series: Convergence and divergence of Infinite Series, Comparison Tests of positive terms Infinite series, Cauchy's general principle of Convergence of series, Convergence and divergence of geometric series, Hyper Harmonic series or p-series. D-Alembert's ratio test, Raabe's test, Logarithmic test, De Morgan and Bertrand's test, Cauchy's nth root test, Gauss Test, Cauchy's integral test, Cauchy's condensation test. Alternating series: Leibnitz's test, absolute and conditional convergence. Arbitrary series: Abel's lemma, Abel's test, Dirichlet's test.	17 Nov., 2022 onwards	Test
Unit-3	Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Coefficients, Dirichlet's conditions, Parseval's identity for Fourier series, Fourier series for even and odd functions, Half range series, Change of Intervals.	26 Aug., 2022 to 10 Sep., 2022	Test
Unit-4	Riemann integral: Definition and examples. Darboux's Theorem and condition of existence of Riemann's integral. Integrabililty of continuous, monotonic functions and discontinuous functions. Properties of integrable functions. Continuity and differentiability of integrable functions. Primitive. The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.	12 Sept., 2022 to 6 Oct., 2022	Test
Revision			

Department of Sanskrit

DEPARTMENT : SANSKRIT CLASS BSC 3RD SEM

SUBJECT : SKT (C) PAPER SKT (C)

UNIT	DESCRIPTION OF TOPIC	DURATION	ASSIGNMENT / TEST

UNIT - 1	पद्य भाग पाठ 1 से पाठ 5 तक	16/08/22 TO 17/09/22	
UNIT - 2	गद्य भाग पाठ 1 से पाठ 5 तक	19/09/22 TO 21/10/22	1ST ASSIGNMENT
UNIT - 3	शब्द रूप	27/10/22 TO 19/11/22	2ND ASSIGNMENT
UNIT - 4	अच् सन्धि	21/11/12 TO 07/12/22	TEST
REVISION		12/12/22 TO 14/12/22	

DEPARTMENT : SANSKRIT CLASS BA 3RD SEM

SUBJECT : SKT (E) PAPER SKT (E)

UNIT	DESCRIPTION OF TOPIC	DURATION	ASSIGNMENT / TEST
UNIT - 1	भास , पंचरात्र	16/08/22 TO 17/09/22	

UNIT - 2	नाटक मे प्रयुक्त पारिभाषिक शब्द , संस्कृत गद्य साहित्य का इतिहास	19/09/22 TO 21/10/22	1ST ASSIGNMENT
UNIT - 3	समास , प्रत्यय	27/10/22 TO 19/11/22	2ND ASSIGNMENT
UNIT - 4	लघुसिद्धांत कौमुदी संस्कृत पत्र लेखन	21/11/12 TO 07/12/22	TEST
REVISION		12/12/22 TO 14/12/22	

DEPARTMENT : SANSKRIT CLASS BA 5TH SEM

SUBJECT : SKT (E) PAPER SKT (E)

UNIT	DESCRIPTION OF TOPIC	DURATION	ASSIGNMENT / TEST
UNIT - 1	ABHIGYAN SHAKUNTLAM	16/08/22 TO 24/09/22	
UNIT - 2	MAHAKAVI KALIDAS	27/09/22 TO 21/10/22	1ST ASSIGNMENT
UNIT - 3	HISTORY OF SANSKRIT LITERATURE	27/10/22 TO 19/11/22	2ND ASSIGNMENT
UNIT - 4	LAGHUSIDHANT KOUMIDI ALANKAR	21/11/12 TO 10/12/22	TEST
REVISION		12/12/22 TO 14/12/22	

DEPARTMENT : SANSKRIT CLASS BA 5TH SEM

SUBJECT : SKT (C) PAPER SKT (C)

UNIT	DESCRIPTION OF TOPIC	DURATION	ASSIGNMENT / TEST

UNIT - 1	NITI SHATAK SHALOKAS 01 TO 25	16/08/22 TO 17/09/22	
UNIT - 2	NITI SHATAK SHALOKAS 26 TO 50	19/09/22 TO 21/10/22	1ST ASSIGNMENT
UNIT - 3	HISTORY OF SANSKRIT LITERATURE	27/10/22 TO 19/11/22	2ND ASSIGNMENT
UNIT - 4	LAGHUSIDHANT KOUMIDI KARKA PARKARAN	21/11/12 TO 07/12/22	TEST
REVISION		12/12/22 TO 14/12/22	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: skt

Name of Teacher: Manju kumari Class: B.A 3rd

Subject: skt. Paper: Elective

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	कालिदास, अभिज्ञान शाकुन्लम्- प्रथम से चतुर्थ अंक तक	अगस्त बीते सप्ताह से सितंबर तक	प्रथम प्रदत्त कार्य अगस्त अंतिम सप्ताह सितंबर अंतिम सप्ताह कक्षा परीक्षा

Unit-2	कालिदास का जीवन परिचय काल विवेचन काव्य शैली नाट्य शैली	सितंबर से अक्टूबर दितीय सप्ताह तक	वित्तीय प्रदत्त कार्य अक्टूबर अंतिम सप्ताह
Unit-3	सस्कृत साहित्य का इतिहास वैदिक साहित्य संहिता ब्राह्मण आरण्यक उपनिषद् वेदांग साहित्य	अक्टूबर तृतीय सप्ताह से नवंबर प्रथम सप्ताह तक	नवंबर प्रथम सप्ताह कक्षा वार्तालाप
Unit-4	वरदराज, लघुसिद्धान्तकौमुदी विभक्त्थप्रकरणः सूत्र व्याख्या वाक्य रचना, अशुद्ध संशोधन अलंकार	नवंबर द्वितीय सप्ताह से दिसंबर प्रथम सप्ताह तक	
Revision	पुनरावृति	दिसंबर तक	

Name of Teacher: Manju kumari Class: B.A 1st
Subject: skt. Paper: Elective

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	हितोपदेश की प्रस्ताविका(कथामुख) कथा1: कपोत राज, मुषिकराजयो: कथा कथा 2: वृद्ध व्याघ्र लुब्धविपप्रयो: कथा कथा3: मृगश्रृगालयो: कथा कथा4: वृद्ध , गृध-माजायो : कथा	अगस्त द्वितीय सप्ताह से सितंबर तक	प्रथम प्रदत कार्य अगस्त अंतिम सप्ताह सितंबर अंतिम सप्ताह कक्षा परीक्षा

Unit-2	नीतिशतकम्(श्लोक संख्या 1 से 50)	सितंबर से अक्टूबर द्वितीय सप्ताह तक	द्वितीय प्रदत्त कार्य अक्टूबर अंतिम सप्ताह
Unit-3	संस्कृत व्याकरणम्	अक्टूबर तृतीय सप्ताह से नवंबर प्रथम सप्ताह	नवंबर प्रथम सप्ताह कक्षा वार्तालाप
Unit-4	संधि कंठस्थश्लोकाश्च लघुत्तरात्मक प्रश्न उत्तर	नवंबर द्वितीय सप्ताह से दिसंबर प्रथम सप्ताह	
Revision	पुनरावृतिक	दिसंबर तक	

Department of English

Name of Teacher: Dr. Mukesh Kumar Class: BA 5th Sem (Section-C & D)

Subject: English Compulsory Paper: A

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to the novel 'Kanthapura' Chapter 1st, 2nd, 3rd & 4th	3rd week of August to 31st August	1st assignment in the beginning of 4th week of August
Unit-2	Chapter 5th, 6th 7th , 8th & 9th	1st week of September to3rd week of September	Class test in the beginning of first week of September

Unit-3	Chapter 10^{th} , 11^{th}, 12^{th}, 13^{th} & 14^{th}	4^{th} week of September to 2^{nd} week of October	
Unit-4	Chapter 15^{th} , 16^{th}, 17^{th}, 18^{th} & 19^{th} Grammar and Composition	3^{rd} week of October to 3^{rd} week of November	Written test 2^{nd} assignment in the 4^{th} week of October
Revision	All the chapters, Grammar and Composition	4^{th} week of November to 1^{st} week of December	

Name of Teacher: Dr. Mukesh Kumar Class: BA Sem- 3^{rd} (Section-D)

Subject: English Compulsory Paper: A

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	1. Important poetic Forms and Devices 2. Sonnet XVIII 3. Know Then Thyself 4. Non-Finite Verbs: Infinitive and Gerund	3^{rd} week of August to 31^{st} August	1^{st} assignment in the beginning of 4^{th} week of August
Unit-2	5. Elegy Written in a Country Churchyard 6. The World is Too Much With Us 7. Grammar : Prepositions	1^{st} week of September to3rd week of September	Class test in the beginning of first week of September
Unit-3	8. Ode on a Grecian Urn 9. My Last Duchess 10. When You are Old 11. Grammar : Clauses and its Types	4^{th} week of September to 2^{nd} week of October	

Unit-4	12. Where the Mind is without Fear 13. The Bangle Sellers 14. Another Women 15. Grammar : Verb Patterns 16. Prefixes and Suffixes 17. Essay Writing	3rd week of October to 3rd week of November	Written test 2nd assignment in the 4th week of October
Revision	All the chapters.	4th week of November to 1st week of December	

Name of Teacher: Dr. Mukesh Kumar
Subject: English Compulsory

Class: BA 1st Sem (Section-E)
Paper: A

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	1. Speech Sounds 2.Choosing Our Universe 3. Are Dams the Temples of Modern India?	3rd week of August to 1st week of September	1st assignment in the beginning of 1st week of September
Unit-2	4.The Generation Gap 5. Language and National Identity 6. Wounded Plants 7.Playing the English Gentleman	2nd week of September to 4th week of September	Class test in the beginning of 4th week of September
Unit-3	8. Great Books Born out of Great Minds 9. The Responsibility of Young Men	1st week of October to 3rd week of October	

	10.Bharat Mata		
Unit-4	Integrated Grammar: Parts of Speech, Correct uses of Tenses and Common Errors.	4th week of October to 2nd week of November	Written test 2nd assignment in the 4th week of October
Revision	All Chapters and Integrated Grammar	3rd week of November to 1st week of December	

Name of Teacher: Dr. Mukesh Kumar Class: BA 5th Sem
Subject: Functional English (Optional) Paper: A

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	1. "On His Blindness" 2. "Alexander's Feast" 3. "Epistle to Dr. Arbuthnot" 4. Tintern Abbey" 5. Business letters and Faxes: different types of formats, address, opening and closing, subject, heading, sub-heading, numbering etc.	3rd week of August to 31st August	1st assignment in the beginning of 4th week of August
Unit-2	6. "Kubla Khan" 7. "Ode to the West Wind" 8. "Stanzas Written in Dejection" 9. "Ode on a Grecian Urn". 10. "Ode to a Nightingale"	1st week of September to3rd week of September	Class test in the beginning of first week of September

Unit-3	11. " Ulysses" 12. "The Lotus Eater" 13. " Tears Idle Tears" 14. " My Last Duchess" 15. "Scanning letters and faxes for specific information, acquiring familiarity with abbreviations and phrases commonly used in business correspondence "	4th week of September to 2nd week of October	
Unit-4	16. "Rabbi Ben Ezra" 17. "The Last Ride Together" 18. "The "Scholar Gypsy" 19. "Dover Beach" 20. Writing letters of application with curriculum vitae/Resume; letters of invitation, reply to invitation, Enquiry, reference, arrangements, announcing forthcoming Events, products, visits, making bookings and arrangements for conferences trade fair etc., complaints and replies to complaints, apologies and thanks	3rd week of October to 3rd week of November	Written test 2nd assignment in the 4th week of October
Revision	All the chapters.	4th week of November to 1st week of December	

GOVERNMENT COLLEGE, HANSILESSON PLAN
2022-23
CLASS: BA (First Semester)
NAME OF TEACHER: DR. HONEY SETHISUBJECT: ENGLISH

UNITS	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS

	16AUG-10SEP.	Chapter-1 Chapter-2 Chapter-3 With Exercise &Grammar		
	11SEP.-30SEP.	Chapter-4 Chapter-5 Chapter -6 With Exercise &Grammar	Assignment 1	
	01OCT.- 15 OCT.	Chapter-7 Chapter-8 Chapter-9 With Exercise &Grammar	Test	
.	16 OCT.-31OCT. 01NOV.-Till Exam.	Chapter-10 Chapter-11 With Exercise &Grammar **Revision**	Assignment 2	

Government College, Hansi

Unit Wise Lesson Plan for Odd

Semester 2022-2023Name of the

Teacher: - Dr. Honey Sethi

Class B.A. Third

Semester Subject: -

Unit	Description of Topics	Duration	Assignment/Test
Unit-1	Grammatical Errors	16AUG.-31AUG.	

Functional English

UNITS	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
	17 AUG.- 10 SEP.	Chapter-1 Important Poetic Forms andDevices Chapter-2 Sonnet XVIII Chapter-3 Know Then Thyself With Exercise &Grammar		
	11 SEP.-30 SEP	Chapter-4 Elegy Written in a CountryChurchyard Chapter-5 The World is Too Muchwith Us Chapter -6 Ode on a Grecian UrnWith Exercise &Grammar	Assignment 1	
	01 OCT.- 15 OCT.	Chapter-7 My Last Duchess Chapter-8 When You are Old Chapter-9 Where the Mind is withoutFear With Exercise &Grammar	Test	
.	16 OCT.-31OCT. 01NOV-Till Exam.	Chapter-10 The Bangle SellersChapter-11 Another Woman ~~With Exercise &Grammar~~ **Revision**	Assignment 2	

NOVEL	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
KANTHAPURA	16 AUG-10 SEP.	In detail : Chapter-1 Chapter-2 Chapter-3 Chapter-4 With Exercise &Grammar		
	11 SEP.-30SEP.	In detail : Chapter-5 Chapter-6 Chapter -7 Chapter-8 With Exercise &Grammar	Assignment 1	
	30SEP.-15OCT.	In detail : Chapter-9 Chapter-10 Chapter-11 Chapter-12 With Exercise &Grammar	Test	
.	16 OCT.-31OCT.	In detail : Chapter-13 Chapter-14 Chapter-15 Chapter-16 With Exercise &Grammar	Assignment2	

.	01 NOV.-10NOV. 11NOV.-Till Exam.	In detail : Chapter-17 Chapter-18 Chapter-19 With Exercise &Grammar **Revision**		

Government College, Hansi

Unit Wise Lesson Plan for Odd

Semester 2022-2023Name of the

Teacher: - Dr. Honey Sethi

Class B.Sc. Honors (Mathematics)
(First Semester)

Subject: - BXL 101: English

Unit	Description of Topics	Duration	Assignment/Test
Unit-1 **Syntax**	Sentence Structures, Verb Patternsand their usage	First week of August to third week of September	First assignment in third week of September

Unit II: **Phonetics**	Basic Concepts – Vowels, Consonants, Phonemes, Syllables; Articulation of Speech Sounds – Place and Manner of Articulation; Transcription of words and simple sentences, using International Phonetic Alphabet.	Last week of September to Second week of October	Unit test in Second week of October
Unit III: **Comprehension**	Listening and Reading comprehension – Note taking, Reviewing, Summarizing, Interpreting, Paraphrasing and Précis Writing.	Third week of October to last week of October	
Unit IV: **Composition**	Descriptive, Explanatory, Analyticaland Argumentative Writing - description of simple objects like instruments, appliances, places, persons, principles; description and explanation of processes and operations; analysis and arguments in the form of debate and group discussion	First week of November to third week of November	Second assignment in First week of November
Revision, solution of queries, active participation of students	Revision of the Syllabus	Last week of November to till Exams	

Department of Chemistry

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: Chemistry

Name of Teacher: Renu Rani Class: B.Sc.1st Sem Maths (H)

Subject: Chemistry Paper: Chemistry BCL-101

Unit	Description of Chapter / Topics	Duration/ Schedule	Assignment / Test
Unit-1	**Chemical Thermodynamics** **15 Hrs** Objectives and limitations of Chemical Thermodynamics, state functions, thermodynamic equilibrium, work, heat, internal energy, enthalpy. First Law of Thermodynamics: First law of thermodynamics for open, closed and isolated systems. Reversible isothermal and adiabatic expansion/compression of an ideal gas. Irreversible isothermal and adiabatic expansion. Enthalpy change and its measurement, standard heats of formation and absolute enthalpies.Kirchoff's equation. Second and Third Law: Various statements of the second law of thermodynamics. Efficiencyof a cyclic process (Carnot's cycle). Entropy: Entropy changes of an ideal gas with changesin P, V, and T. Free energy and work functions. Gibbs-Helmholtz Equation, Criteria of	4th Week of August-2nd Week of September	**Test – 3rd** Week of September **Assignment 1**- 2nd Week of September

	spontaneity in terms of changes in free energy. Introduction to Third law of thermodynamics.		
Unit-2	**Conductance and Electrochemistry** Arrhenius theory of electrolytic dissociation. Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes. Molar conductivity at infinite dilution.Kohlrausch law of independent migration of ions. Ionic velocities, mobilities and their determinations, transference numbers and their relation to ionic mobilities, determination of transference numbers using Hittorf and Moving Boundary methods. Applications of conductance to measure degree of dissociation of weak electrolytes. Quantitative aspects of Faraday's laws of electrolysis, rules of oxidation/reduction of ions based on half-cell potentials, application of electrolysis in metallurgy and industry. Chemical cells with examples; Standard electrode (reduction) potential.	3rd Week of September-1st Week of October	**Test**-4th Week of September **Assignment 2**- 1st Week of October
Unit-3	**Fundamentals of Organic Chemistry** **15 Hrs** Electronic Displacements: Inductive Effect, Electromeric Effect, ResonanceandHyperconjugation. Cleavage of Bonds: Homolysis and Heterolysis. Structure, shape and reactivity of organic molecules: Nucleophiles and electrophiles.Reactive Intermediates: Carbocations,	2nd Week of October- 4th Week of October	**Test**- 3rd Week of October

	Carbanions and free radicals. Strength of organic acids and bases: Comparative study with emphasis on factors affecting values.		
Unit-4	**Stereochemistry** **8Hrs** Conformations with respect to ethane, butane and cyclohexane.Interconversion of WedgeFormula, Newmann, Sawhorse and Fischer representations.Concept of chirality (uptotwocarbon atoms). Configuration: Geometrical and Optical isomerism; Enantiomerism,Diastereomerism and Meso compounds). Threo and erythro; D and L; *cis–trans* nomenclature; CIP Rules: R/ S (for upto 2 chiral carbon atoms) and E / Z Nomenclature (for upto two C=C systems). **Chemistry of Biomolecules** Occurrence, classification of Carbohydrates. Amino acids, peptides and their classification.α-Amino Acids. Zwitterions, pK_avalues, isoelectric point, components of nucleic acids, nucleosides and nucleotides.	1st Week of November- 3rd Week of November	**Test-** 2nd Week of November
Revision	Revision and Problems of all 4 units	4th Week of Nov-1st Week of Dec.	

Renu Rani

Assistant Professor of Chemistry

Name of Teacher: Renu Rani Class: B.Sc. 3rd Sem NM

Subject: Chemistry Paper: Physical Chemistry-2(CCL-304)

Unit	Description of Chapter / Topics	Schedule/ Duration	Assignment / Test
Unit-1	**Solutions** Thermodynamics of ideal solutions: Ideal solutions and Raoul's law, deviations from Raoul's law – non-ideal solutions. Vapour pressure-composition and temperature composition curves of ideal andnon-ideal solutions. Distillation of solutions. Azeotropes. Colligative properties ofsolutions. Thermodynamic derivations of relation between amount of solute and elevation in boilingpoint and depression in freezing point. Partial miscibility of liquids: Critical solution temperature; effect of impurity on partial miscibility of liquids. Immiscibility of liquids- Principle of steam distillation.	3rd Week of August-2nd week of September	**Test**-2nd Week of September **Assignment 1**- 3rd Week of September
Unit-2	**Phase Equilibrium** Phases, components and degrees of freedom of a system, criteria of phase equilibrium. Gibbs Phase Rule and its thermodynamic derivation. Derivation of Clausius – Clapeyron equation and its importance in phase equilibria. Phase diagrams of one-component systems (water and sulphur) and two component systems involving eutectics, congruent and incongruent melting points (lead-silver, and Na-K only).	3rd Week of September-1st Week of October	**Test**-1st Week of October **Assignment 2**-2nd Week of October
Unit 3	**Conductance** Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes.Kohlrausch law of independent migration of ions. Transference number, ionic mobility. Applications of conductance measurements: determination of degree of ionization of weak electrolyte, solubility and solubility products of sparingly soluble salts, ionic product of water, hydrolysis constant of a salt. Conductometric	2nd Week of October-4th Week October	**Test**- 3rd Week of October

	titrations (only acid- base).Concept of pH and pK_a, buffer solution, buffer action, Henderson Hazel Blac equation.		
Unit-4	**Electrochemistry** Reversible and irreversible cells. Concept of EMF of a cell. Measurement of EMF of a cell. Nernst equation and its importance. Types of electrodes. Standard electrode potential. Electrochemical series. Thermodynamics of a reversible cell, calculation of thermodynamic properties: ΔG, ΔH and ΔS from EMF data. Calculation of equilibrium constant from EMF data. Concentration cells with transference and without transference. Liquid junction potential and salt bridge.pH determination using hydrogen electrode and quinhydrone electrode. Potentiometric titrations -qualitative treatment (acid-base and oxidation-reduction only).	1st Week of November- 3rd Week of November	**Test**-2nd Week of November
Revision	Problems and Revision of all 4 units	4th week of November- 1st week of December	

Renu Rani

Assistant Professor of Chemistry

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: chemistry

Name of Teacher Poonam Devi Class: B.Sc.1st Sem (N.M.)

Subject: Inorganic chemistry Paper: Chemistry CCL-104

Unit	Description of Chapter / Topics	Duration	Assignment / Test

Unit-1	***Review of: Bohr's theory and its limitations, dual behaviour of matter and radiation, de Broglie's relation, Heisenberg Uncertainty principle. Hydrogen atom spectra. Need of a new approach to Atomic structure.*** ***What is Quantum mechanics? Time independent Schrodinger equation and meaning of various terms in it. Significance of ψ and ψ², Schrödinger equation for hydrogen atom. Radial and angular parts of the hydogenic wavefunctions (atomic orbitals) and their variations for 1s, 2s, 2p, 3s, 3p and 3d orbitals (Only graphical representation).***	4th week of august -2nd week of september	Assignment 1st In 1st week of september
Unit-2	***Radial and angular nodes and their significance. Radial distribution functions and the concept of the most probable distance with special reference to 1s and 2s atomic orbitals. Significance of quantum numbers, orbital angular momentum and quantum numbers ml and ms. Shapes of s, p and d atomic orbitals, nodal planes. Discovery of spin, spin quantum number (s) and magnetic spin quantum number (ms).*** Rules for filling electrons in various orbitals, Electronic configurations of the atoms. Stability of half-filled and completely filled orbitals, concept of exchange energy. Relative energies of atomic orbitals, Anomalous electronic configurations	3rd week of setember -2nd week of october	Unit test in 1st week of october
Unit-3	***Ionic Bonding: General characteristics of ionic bonding. Energy considerations in ionic bonding, lattice energy and***	3rd week of october -1st week of november	Oral test

	solvation energy and their importance in the context of stability and solubility of ionic compounds. Statement of Born-Landé equation for calculation of lattice energy, Born-Haber cycle and its applications, polarizing power and polarizability. Fajan's rules, ionic character in covalent compounds, bond moment, dipole moment and percentage ionic character. ***Covalent bonding: VB Approach: Shapes of some inorganic molecules and ions on the basis of VSEPR and hybridization with suitable examples of linear, trigonal planar, square planar, tetrahedral, trigonal bipyramidal and octahedral arrangements.*** ***Concept of resonance and resonating structures in various inorganic and organic compounds.***		
Unit-4	***MO Approach: Rules for the LCAO method, bonding and antibonding MOs and their characteristics for s-s, s-p and p-p combinations of atomic orbitals, nonbonding combination of orbitals, MO treatment of homonuclear diatomic molecules of 1st and 2nd periods (including idea of s-p mixing) and heteronuclear diatomic molecules such as CO, NO and NO^+. Comparison of VB and MO approaches.***	2nd week of November - 4th week of November	Assignment 2^{nd} In 1^{st} week of november

Revision		1st week of december	

Name of Teacher Poonam Devi Class: B.Sc.5th Sem (N.M.)
Subject: main gp. Element -1 (chemistry) Paper: Chemistry CCL-503(ii)

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Acids and Bases:** Bronsted–Lowry concept, conjugate acids and bases, relative strengths of acids and bases, effects of substituent and solvent, differentiating and levelling solvents. Lewis acid-base concept,classification of Lewis acids and bases, Lux-Flood concept and solvent system concept.Hard and soft acids and bases (HSAB concept), applications of HSAB process.	2nd week of august -1st week of september	Assignment 1st In 1st week of september
Unit-2	Chief modes of occurrence of metals based on standard electrodepotentials, Ellingham diagrams for reduction of metal oxides using carbon and carbon monoxide as reducing agents. Hydrometallurgy with reference to cyanide process for gold and silver. Methods of purification of metals (Al, Pb, Ti, Fe, Cu, Ni, Zn, Au): electrolytic refining, zone refining, van Arkel-de Boer process, Parting Process, Mond's process and Kroll Process.	2nd week of setember -1st week of october	Unit test in 1st week of october
Unit-3	Periodicity in *s*- and *p*-block elements with respect to electronic configuration, atomic and ionic size, ionization enthalpy, electron gain enthalpy, electronegativity (Pauling scale). General characteristics of *s*-block metals like density, melting and boiling points, flame colour andreducing nature. Oxidation states of *s*- and *p*-block elements, inert-pair effect, diagonal relationships and anomalous	2nd week of october -1st week of november	Oral test

	behaviour of first member of each group. Allotropy in C, P and S.		
Unit-4	Complex forming tendency of *s* block elements and a preliminary idea of crown ethers and cryptates, structures of basic beryllium acetate, salicylaldehyde/ acetylacetonato complexes of Group 1 metals.Solutions of alkali metals in liquid ammonia and their properties. Common features, such as ease of formation, solubility and stability of oxides, peroxides, superoxides,sulphates and carbonates of *s*-block metals.	2nd week of November - 4th week of November	Assignment 2nd In 1st week of november
Revision		1st week of december	Oral test

Lesson Plan

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Department - Chemistry

Name of Teacher : **SUDESH** Class : **B.Sc 3rd Semester**
Subject: **Organic Chemistry** (CCL-305) Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Carboxylic acids (aliphatic and aromatic) Preparation: Acidic and Alkaline hydrolysis of esters. Reactions: Hell-Vohlard-Zelinsky Reaction. Preparation: Acid chlorides, Anhydrides, Esters and Amides from acids and their interconversion. Reactions: Comparative study of nucleophilicity of acyl derivatives. Reformatsky Reaction, Perkin condensation.	3rd week of August to 3rd week of September	Verbly test

Unit 2	Amines (Aliphatic and Aromatic): (Upto 5 carbons) Preparation: from alkyl halides, Gabriel's Phthalimide synthesis, HofmannBromamide reaction. Reactions: Hofmann vs. Saytzeff elimination, Carbylamine test, Hinsberg test, with HNO2, SchottenBaumann Reaction. Electrophilic substitution (case aniline): nitration, bromination, sulphonation. Diazonium salts: Preparation: from aromatic amines. Reactions: conversion to benzene, phenol, dyes.	4th week of September to 3rd week of October	Ist Assignment in 3rd week of October
Unit 3	Preparation of Amino Acids: Strecker synthesis using Gabriel's phthalimide synthesis. Zwitterion, Isoelectric point and Electrophoresis. Reactions of Amino acids: ester of –COOH group, acetylation of –NH2 group, complexation with Cu2+ ions, ninhydrin test. Overview of Primary, Secondary, Tertiary and Quaternary Structure of proteins. Determination of Primary structure of Peptides by degradation Edmann degradation (N-terminal) and C–terminal (thiohydantoin and with carboxypeptidase enzyme).Synthesis of simple peptides (upto dipeptides) by N-protection (t-butyloxycarbonyl and phthaloyl) & C-activating groups and Merrifield solid-phase synthesis.	4th week of October to 2nd week of november	Minor test in the last week of October
Unit 4	Classification, and General Properties, Glucose and Fructose (open chain and cyclic structure), Determination of configuration of monosaccharides, absolute configuration of Glucose and Fructose, Mutarotation, ascending and descending in monosaccharides. Structure of disacharrides (sucrose, cellobiose, maltose, lactose) and polysacharrides (starch and cellulose) excluding their structure elucidation.	3rd week of November to 4th week of november	2nd Assignement in the 3rd week of November
Revision	Revision, problem solving	1st week of December	

Name of Teacher : **SUDESH** Class : **B.Sc 5th Semester**

Subject: **Pesticide Chemistry** (CCS-505(i)) Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	General introduction to pesticides (natural and synthetic), classification of pesticides, benefits and adverse effects of pesticides on environment, human health, soil etc, changing concepts of pesticides.	3rd week of August to 4th week of September	Verbly test and presentation
Unit 2	Structure activity relationship, synthesis and uses of representative pesticides in the following classes: Organochlorines (DDT, Gammexene, Aldrin, Dialdrin); Organophosphates (Malathion, Parathion); Carbamates (Carbofuran and carbaryl); Quinones (Chloranil), Anilides (Alachlor and Butachlor).	1st week of October to 3rd week of November	Presentation, Assignment in 3rd week of November
Revision	Revision, problem solving	4th week of November and 1st week of December	

Name of Teacher : **SUDESH** Class : **B.Sc 5th Semester**

Subject: **Fuel Chemistry** (CCS-505(ii)) Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Review of energy sources (renewable and non-renewable). Classification of fuels and their calorific value. Coal: Uses of coal (fuel and nonfuel) in	3rd week of August to 4th week of September	Verbly test and presentation

	various industries, its composition, carbonization of coal. Coal gas, producer gas and water gas—composition and uses. Fractionation of coal tar, uses of coal tar bases chemicals, requisites of a good metallurgical coke, Coal gasification (Hydro gasification and Catalytic gasification), Coal liquefaction and Solvent Refining. Petroleum and Petrochemical Industry: Composition of crude petroleum, Refining and different types of petroleum products and their applications.		
Unit 2	Fractional Distillation (Principle and process), Cracking (Thermal and catalytic cracking), Reforming Petroleum and non-petroleum fuels (LPG, CNG, LNG, bio-gas, fuels derived from biomass), fuel from waste, synthetic fuels (gaseous and liquids), clean fuels. Petrochemicals: Vinyl acetate, Propylene oxide, Isoprene, Butadiene, Toluene and its derivatives Xylene. Lubricants: Classification of lubricants, lubricating oils (conducting and nonconducting) Solid and semisolid lubricants, synthetic lubricants. Properties of lubricants (viscosity index, cloud point, pore point) and their determination.	1st week of October to 3rd week of November	Presentation, Assignment in 3rd week of November
Revision	Revision, problem solving	4th week of November and 1st week of December	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher : **Manjeet Malik**

Class : **B.Sc 1st Semester** Subject: **Biology-I** Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	ecosystem; cell; Biology and everyday life; the origin of life; Major events in the history of life; Mechanism of Macroevolution; Phylogeny and the tree of life; Kingdoms of Life; Darwinian view of life and origin of species	3rd week of August to 3rd week of September	Verbly test
Unit 2	Variation on Mendel's Law; flow of genetic information from DNA to RNA to protein; Genetic Variation; genes and gene activities; Developmental noise; Detecting macromolecules of genetics; Model organisms for the genetic analysis; Distinction between Phenotype and Genotype	4th week of September to 3rd week of October	Ist Assignment in 3rd week of October
Unit 3	Structure of an atom; The energy level of electron; The formation and function of molecules depend on chemical bonding between atoms; Chemical reaction make or break chemical bonds; The water molecule is polar; Properties of water; Ionization of water;Organic chemistry-the study of carbon compounds; what makes carbon special? Properties of organic compounds	4th week of October to 1st week of november	Minor test in the last week of October
Unit 4	Carbohydrates act as fuel and building materials; Lipids are group of hydrophobic molecules; structures and functions of protiens; Role of Nucleic acids in storing and transmitting hereditary information	2nd week of November to 3rd week of november	2nd Assignement in the 2nd week of November

Revision	Revision, problem solving	Last week of November	

Lesson Plan

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Department - Chemistry

Name of Teacher : **Dr. Manjeet Malik** Class : **B.Sc 5th Semester**

Subject: **POLYMER CHEMISTRY-II** (CCL-504(i)) Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Mechanism and kinetics of step growth, radical chain growth, ionic chain (both cationic and anionic) and coordination polymerizations, Mechanism and kinetics of copolymerization, polymerization techniques.	3rd week of August to 3rd week of September	Verbly test
Unit 2	Determination of crystalline melting point and degree of crystallinity, Morphology of crystalline polymers, Factors affecting crystalline melting point. Glass transition temperature (Tg) and determination of Tg, Free volume theory, WLF equation, Factors affecting glass transition temperature (Tg).	4th week of September to 3rd week of October	Ist Assignment in 3rd week of October
Unit 3	Determination of molecular weight of polymers (Mn, Mw, etc) by end group analysis, viscometry, light scattering and osmotic pressure methods.Molecular weight distribution and its significance.Polydispersity index.	4th week of October to 2nd week of november	Minor test in the last week of October

Unit 4	Polymer Solution: Criteria for polymer solubility, Solubility parameter, Thermodynamics of polymer solutions, entropy, enthalpy, and free energy change of mixing of polymers solutions, Flory- Huggins theory, Lower and Upper critical solution temperatures.	3rd week of November to 4th week of november	2nd Assignement in the 3rd week of November
Revision	Revision, problem solving	1st week of December	

Name of Teacher : **Dr. Manjeet Malik** Class : **B.Sc 5th Semester**

Subject: **POLYMER CHEMISTRY-II** (CCL-504(i)) Paper : **Theory**

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test**
Unit 1	Mechanism and kinetics of step growth, radical chain growth, ionic chain (both cationic and anionic) and coordination polymerizations, Mechanism and kinetics of copolymerization, polymerization techniques.	3rd week of August to 3rd week of September	Verbly test
Unit 2	Determination of crystalline melting point and degree of crystallinity, Morphology of crystalline polymers, Factors affecting crystalline melting point. Glass transition temperature (Tg) and determination of Tg, Free volume theory, WLF equation, Factors affecting glass transition temperature (Tg).	4th week of September to 3rd week of October	Ist Assignment in 3rd week of October

Unit 3	Determination of molecular weight of polymers (Mn, Mw, etc) by end group analysis, viscometry, light scattering and osmotic pressure methods.Molecular weight distribution and its significance.Polydispersity index.	4th week of October to 2nd week of november	Minor test in the last week of October
Unit 4	Polymer Solution: Criteria for polymer solubility, Solubility parameter, Thermodynamics of polymer solutions, entropy, enthalpy, and free energy change of mixing of polymers solutions, Flory- Huggins theory, Lower and Upper critical solution temperatures.	3rd week of November to 4th week of november	2nd Assignement in the 3rd week of November
Revision	Revision, problem solving	1st week of December	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: Chemistry

Name of Teacher: Priyanka Punia Class: B.Sc.5th Sem (N.M.)

Subject: : main gp. Element -ii (chemistry) Paper: Chemistry CCL-504(ii)

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Structure, bonding and properties (acidic/ basic nature, oxidizing/ reducing nature and hydrolysis of the following compounds and their applications in industrial and environmental chemistry wherever applicable: Diborane and concept of multicentre bonding, hydrides of Groups 13 (EH_3), 14, 15, 16 and 17.Oxides of N and P, Oxoacids of P, S and Cl.	2nd week of august -1st week of september	Assignment 1st In 1st week of september

Unit-2	Halides and oxohalides of P and S (PCl_3, PCl_5, $SOCl_2$ and SO_2Cl_2) Interhalogen compounds.A brief idea of pseudohalides	Assignment 1^{st} In 1^{st} week of september	Assignment 1^{st} In 1^{st} week of september
Unit-3	**Noble gases:** Rationalization of inertness of noble gases, clathrates, preparation and properties of XeF_2, XeF_4 and XeF_6 ,bonding in these compounds using VBT and shapes of noble gas compounds using VSEPR Theory	Assignment 1^{st} In 1^{st} week of september	Assignment 1^{st} In 1^{st} week of september
Unit-4	**Inorganic Polymers:** Types of inorganic polymers and comparison with organic polymers, structural features, classification and important applications of silicates. Synthesis, structural features and applications of silicones.Borazines and cyclophosphazenes – preparation, properties and reactions.Bonding in $(NPCl_2)_3$.	2nd week of November -4th week of November	Assignment 2^{nd} In 1^{st} week of november
Revision		1^{st} week of december	Oral test

Department of Psychology

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: Psychology

Name of Teacher: Dr. Alka
Class: B.A 1st
Subject :Psychology
Paper: Introduction to Psychology

Unit	Description of Chapter / Topics	Duration	Assignment / Test

Unit-1	Psychology : history, as science, subject matter Methods of psychology: experimental, observation, survey	25 August 2022 to 20 September 2022	1st assignment in the 3rd week of September
Unit-2	Sensory processes: visual, auditory-structure and function of Eye and Ear. Perception: nature, perception of form-figure and background, perceptual organization, depth perception-cues.	21 September 2022 to 20 October 2022	Minor Test in the Last Week of September
Unit-3	Emotion: nature, bodily changes, theories-james-lange, cannon-bard, Schachter-singer. Motivation: nature ,biological and psychological motives.	21 October 2022 to 20 November 2022	2nd Assignment in the Last Week of October
Unit-4	Personality : nature, determinants and type and trait approach. Intelligence : nature, theories-spearman, Thurstone and cattle.	21 November 2022 to 20 December 2022	
Revision		21 December 2022 to 26 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2022-23

Department: Psychology

Name of Teacher: Dr. Alka
Class: B.A IInd
Subject :Psychology
Paper: Social Psychology

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction: nature, subject matter, sociometric method. Socialization: nature, process and agents of socialization.	16 August to 10 Sept, 2022	1st assignment in the last week of September
Unit-2	Group : types and functions, social norms: meaning, characteristics and formation. Leadership : type, function, theories-trait, situational and interactional.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Attitudes : characteristics, developmental and attitude change. Prejudice : nature, development and stereotypes.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Prosocial behavior: nature, determinants, cognitive model. Aggression : nature, determinants and prevention.	27 October 2022 to 19 November 2022	
Revision		21 November 2022 to 7 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2022-23

Department: Psychology

Name of Teacher: Dr. Alka
Class: B.A III
Subject : Psychology
Paper: Psychopathology

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Concept of normality and abnormality. Models of Psychopathology : biological, psychodynamic, behavioural and cognitive.	16 August to 10 Sept, 2022	1st assignment in the last week of September
Unit-2	Classification of psychopathology : need for classification, DSM system. Diagnostic Assessment : case history, interview projective techniques.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Anxiety based disorder: GAD, OCD, and phobic disorders- symptoms and causes. Substance / drug abuse: causes, consequences and rehabilitation.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Mood disorders : unipolar and biopolar- symptoms and causes. Schizophrenia : nature, types and casues.	27 October 2022 to 19 November 2022	
Revision		21 November 2022 to 7 December 2022	

Department of Hindi

Lesson Plan

Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2022-23

Department: Hindi

Name of Teacher: डॉ संजय कुमार Class: B.A. द्वितीय वर्ष

Subject: हिंदी Section :-D

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	आधुनिक हिंदी कविता कवि:- अयोध्या सिंह उपाध्याय 'हरिऔध', मैथिलीशरण गुप्त, जयशंकर प्रसाद, सूर्यकांत त्रिपाठी 'निराला', महादेवी वर्मा रामधारी सिंह 'दिनकर', भारत भूषण 'अग्रवाल' का जीवन परिचय एवं सप्रसंग काव्य व्याख्या, प्रश्न उत्तर	अगस्त के दूसरे सप्ताह अंत से अक्टूबर के प्रथम सप्ताह तक	प्रथम प्रदत्त कार्य सितंबर प्रथम सप्ताह प्रथम कक्षा परीक्षा सितंबर तीसरे सप्ताह
Unit-2	हिंदी साहित्य का रीतिकाल रीतिकालीन हिंदी कविता, पृष्ठभूमि, नामकरण, रीतिकाल की प्रवृत्तियां, रीतिबद्ध, रीतिसिद्ध, रीतिमुक्त काव्य, रीतिकाल की उपलब्धियां	अक्टूबर दूसरे सप्ताह से अक्टूबर चौथे सप्ताह तक	मौखिक परीक्षा अक्टूबर तीसरे सप्ताह प्रदत कार्य द्वितीय अक्टूबर चौथे सप्ताह
Unit-3	प्रयोजनमूलक हिंदी कंप्यूटर स्वरूप और महत्व, ईमेल, इंटरनेट, मशीनी अनुवाद अनुवाद परिभाषा और स्वरूप	नवंबर प्रथम सप्ताह से नवंबर तीसरे सप्ताह तक	द्वितीय कक्षा परीक्षा नवंबर तीसरे सप्ताह
पुनरावृति			
	पुनरावृति	नवंबर चौथे सप्ताह से दिसंबर प्रथम सप्ताह से	

Name of Teacher: डॉ संजय कुमार Class: B.A. प्रथम वर्ष

Subject: हिंदी Section :-B, D, E

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	मध्यकालीन काव्य कुंज कवि :-कबीरदास, सूरदास, तुलसीदास, मीरांबाई, बिहारी लाल, घनानंद, रसखान का जीवन परिचय, काव्य की सप्रसंग व्याख्या एवं प्रश्न उत्तर	अगस्त के तीसरे सप्ताह अंत से सितंबर के तीसरे सप्ताह तक	प्रथम प्रदत्त कार्य सितंबर प्रथम सप्ताह प्रथम कक्षा परीक्षा सितंबर तीसरे सप्ताह
Unit-2	हिंदी साहित्य का आदिकाल साहित्य इतिहास लेखन परंपरा, आदिकाल का नामकरण आदिकाल की प्रवृत्तियां, आदिकाल की सामाजिक, राजनीतिक धार्मिक, सांस्कृतिक, साहित्यिक परिस्थितियां, वीरगाथा काव्य विशेषताएं, रासो काव्य परंपरा	सितंबर चौथे सप्ताह से अक्टूबर चौथे सप्ताह तक	मौखिक परीक्षा अक्टूबर प्रथम सप्ताह प्रदत कार्य द्वितीय अक्टूबर चौथे सप्ताह
Unit-3	काव्यशास्त्र काव्य के तत्व, रस, रस के भेद, अलंकार, छंद, शब्द शक्ति काव्य गुण	नवंबर प्रथम सप्ताह से नवंबर चौथे सप्ताह तक	द्वितीय कक्षा परीक्षा नवंबर तीसरे सप्ताह
पुनरावृति			
	पुनरावृति	दिसंबर प्रथम सप्ताह से दिसंबर तीसरे सप्ताह तक	

Unit wise Lesson Plan for the Odd Semester 2022-23

Name of Teacher : Baljeet Rani

Class: B.A 3rd. Subject : Hindi paper : Compulsory

Unit	Description of Topic / Chapter	Duration.	Assignment / Test
Unit 1st.	अज्ञेय, धर्मवीर भारती, नरेश महता, नागार्जुन, रघुवीर सहाय,कुँवर नारायण, लीलाधर जगूड़ी,	तृतीय सप्ताह अगस्त से तृतीय सप्ताह सितंबर तक	प्रथम प्रदत कार्य तृतीय सप्ताह अगस्त, प्रथम कक्षा परीक्षा आखिरी सप्ताह सितंबर
Unit 2nd.	हिंदी साहित्य का आधुनिक कालः कविता, आधुनिक हिंदी कविता का क्रमिक विकास, आधुनिक हिंदी साहित्य की परिस्थितियां, भारतेंदुयुगीन हिंदी कविता की प्रवृतियाँ, द्धिवेदी युगीन हिंदी कविता की प्रवृत्तियाँ, छायावाद, प्रगृतिवाद, प्रयोगवाद, नयी कविता, समकालीन कविता,	आखिरी सप्ताह सितंबर से आखिरी सप्ताह अक्तुबर तक	मौखिक परीक्षा प्रथम सप्ताह अकतुबर, द्वितीय प्रदत कार्य आखिरी सप्ताह अकतुबर
Unit 3rd	पत्र-लेखन, संबोधन तथा उपसंहार, वैयक्तिक पत्र, प्रार्थना-पत्र, शिकायती-पत्र, सम्पादक के नाम पत्र, निमंत्रण-पत्र, कायालय पत्र,	प्रथम सप्ताह नवंबर से द्वितीय सप्ताह नवंबर तक	द्धितीय कक्षा परीक्षा प्रथम सप्ताह नवंमबर।
Unit-4	संक्षेपण, पल्लवन	तृतीय नवबर से नवबर आखिर	
Revision	पुनरावृत्ति	नवंबर आखिरी सप्ताह।	

Lesson Plan Format

Govt Collage Hansi ...Unit wise Lesson Plan for the Odd Semester 2022-23

Name of Teacher: Baljeet Rani

Class: B .SC 2nd Subject : Hindi paper : Compulsory

Unit	Description of Topic / Chapter	Duration.	Assignment / Test
Unit 1st.	अभिनव काव्य गरिमाः साहित्यिक परिचय एंव सप्रंसग व्याख्याः जयशंकर प्रसाद, मैथिली शरण गुप्त, सूर्य कांत त्रिपाठी निराला, रामधारी सिंह दिनकर।	-अगस्त से सिंतबर	प्रथम प्रदत्त कार्य अगस्त अन्तिम सप्ताह सितंबर अतिंम सप्ताह, कक्षा- परीक्षा
Unit 2nd.	निबंध-लेखनः मानवाधिकार, नैतिक शिक्षा, मध-निषेध, विज्ञान और औद्योगिकरण, वैज्ञानिक प्रगति में भारत का योगदान, वैश्वीकरण और विज्ञान, दूरदशन , समाचार पत्रों का महत्व।	अक्टूबर प्रथम-तृतीय सप्ताह	द्धितीय प्रदत्त कार्य अक्टूबर अन्तिम सप्ताह
Unit 3	सरकारी पत्र, अर्द्धसरकारी पत्र	अक्टूबर अन्तिम सप्ताह नवंबर प्रथम सप्ताह	
Unit 4	वैज्ञानिक शब्दावली	नंवबर आखिरी सप्ताह	
Revision	पुनरावृति	दिसंबर प्रथम सप्ताह	

Lesson Plan Format

Govt Collage Hansi ...Unit wise Lesson Plan for the Odd Semester 2022-23

Name of Teacher: Baljeet Rani

Class: B .A 3rd Subject : Hindi paper : Elective

Unit	Description of Topic / Chapter	Duration.	Assignment / Test
Unit 1st.	अज्ञेय, धर्मवीर भारती, भवानी प्रसाद मिश्र, दुष्यंत कुमार , रधुवीर सहाय, सवेश्वर दयाल सक्सेना, शमशेर बहादुर सिंह, सप्रंसग व्याख्या, प्रश्न उत्तर,	अगस्त से सितम्बर।	प्रथम प्रदत्त कार्य अगस्त अन्तिम सप्ताह सितंबर अतिंम सप्ताह, कक्षा- परीक्षा
Unit 2nd.	कथा वातायन, पिताः ज्ञानरंजन, अपना रास्ता लो बाबाःकाशीनाथ सिंह, इक्कीसवीं सदी का पेडः मृदुला गर्ग, बच्चे गवाह नहीं हो सकतेः पंकज बिष्ट, पाटीशनः स्वयं प्रकाश, तिरिछः उदयप्रकाश, आरोहणः संजीव कुमार, सप्रंसग व्याख्या, प्रश्न उत्तर,	अक्टूबर प्रथम-तृतीय सप्ताह	द्धितीय प्रदत्त कार्य अक्टूबर अन्तिम सप्ताह
Unit 3	हिंदी साहित्य का आधुनिक कालः गध, आधुनिक काल की परिस्थितियाँ, हिंदी उपन्यासः उद्भव और विकास, हिंदी नाटकःउदभव और विकास, हिंदी कहानीः उदभव और विकास, हिंदी निबंधः उदभव और विकास, हिंदी आलोचना उदभव और विकास, आत्मकथाः उदभव और विकास, जीवनीः उदभव	अक्टूबर अन्तिम सप्ताह नवंबर प्रथम सप्ताह	

	और विकास, यात्रावृतः उदभव और विकास,		
Unit 4	पुनरावृत्ति	नंवबर आखिरीसप्ताह	
Revision		दिसंबर प्रथम सप्ताह	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: Hindi

Name of Teacher:Baljeet Rani Class: B.A 2nd

Subject:Hindi Paper: Elective

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	मैथिलीशरण गुप्त जयशंकर प्रसाद सुमित्रानंदन पंत सूर्यकांत त्रिपाठी निराला महादेवी वर्मा	अगस्त से सितंबर तक	प्रथम प्रदत्त कार्य अगस्त अंतिम सप्ताह सितंबर अंतिम सप्ताह कक्षा परीक्षा
Unit-2	बालकृष्ण शर्मा नवीन	अक्टूबर प्रथम से	द्वितीय प्रदत कार्य अक्टूबर अंतिम सप्ताह

	रामधारी सिंह दिनकर ईद का मेला प्रेमचंद जी छोटा जादूगर जयशंकर प्रसाद पढ़ाई जैनेंद्र कुमार आदमी का बच्चा यशपाल दरोगा अमीचंद अज्ञेय	तृतीय सप्ताह	
Unit-3	दिल्ली में एक मौत कमलेश्वर नई नौकरी मन्नू भंडारी हिंदी साहित्य का रीतिकाल रितिकालीन हिंदी कविता के प्रेरणा स्तोत्र रीतिकाल का नामकरण रीतिकाल का विभाजन रीतिबद्ध काव्य की प्रवृत्तियां	अक्टूबर अंतिम सप्ताह से नवंबर प्रथम सप्ताह	नवंबर प्रथम सप्ताह कक्षा वार्तालाप
Unit-4	रीतिसिद्ध काव्य की प्रवृत्तियां रीतिमुक्त काव्य की प्रवृत्तियां रीति कवियों का आचार्य तब रीति हिंदी काव्य की उपलब्धियां लघु उत्तर आत्मक प्रश्न अति लघु उत्तर आत्मक प्रश्न उत्तर	नवंबर आखिरी सप्ताह	

Revision	पुनरावृति	दिसंबर आखिरी सप्ताह तक	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester (2022-23)

Department: Hindi

Name of Teacher : Dr. Madhulika **Class: B.A. I (Ist Sem.)**

Subject: Hindi **Paper: Hindi Comp.**

Section : C

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	lizlax O;k[;k dchjnkl] lwjnkl] rqylhnkl] ehjkckbZ] fcgkjh yky] ?kukuan] jl[kku	vxLr ds vafre lIrkg ls vDrwcj ds vafre lIrkg rd	izFke iznr dk;Z izFke d{kk ijh{kk vkf[kjh lIrkg rd
Unit-2	fgUnh lkfgR; dk vkfndky % iz'uksÙkj] bfrgkl ys[ku ijEijk] ukedj.k dh leL;k] ifjfLFkfr;ka] izo`fÙk;ka] jklks dkO;	uoEcj ds izFke] lIrkg ls fnlEcj ds izFke lIrkg rd	ekSf[kd ijh{kk iznr dk;Z
Unit-3	dkO;&'kkL= % iz'uksÙkj dkO; ds rRo] jl Hksn] vyadkj] 'kCn&'kfDr] dkO; xq.k] Nun] y?kqrjkRed iz'uksÙkj] vfr y?kqrjkRed iz'uksÙkj	fnlEcj ds f}rh; lIrkg rd	f}rh; d{kk ijh{kk iznr dk;Z f}rh;

Revision	iqujko`fÙk	fnlEcj ds r`rh; lIrkg rd	

Department: Hindi

Name of Teacher : Dr. Madhulika **Class: B.A. II (3rd Sem.)**
Subject: Hindi **Paper: Hindi Comp.**
Section : E

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	lizlax O;k[;k v;ks/;k flag mik/;k;] eSfFkyh'kj.k xqIr] t;'kadj izlkn] lw;Zdkar f=ikBh fujkyk] egknsoh oekZ] jke/kkjh flag fnudj] Hkkjr Hkw"k.k vxzoky	vxLr ds nwljs lIrkg var ls vDrwcj ds vafre lIrkg rd	izFke iznr dk;Z izFke d{kk ijh{kk vkf[kjh lIrkg rd vxLr
Unit-2	fgUnh lkfgR; iz'uksÙkj dk jhfrdky] fgUnh dfork dh i`"BHkwfe ukedj.k] jhfrdkRe izo`fr;ka] jhfrc) dkO;] jhfreqDr dkO;] jhfrdkyhu dkO; dh miyfC/k;ka] y?kqrjkRed Ikz'u	uoEcj ds izFke] lIrkg ls rhljs lIrkg rd	ekSf[kd ijh{kk iznr dk;Z
Unit-3	iz;kstuewyd fgUnh % iz'uksÙkj daI;wfVd vkSj vuqokn dEI;wVj % Lo:Ik vkSj egRo bZesy % izs"k.k&xzg.k baVjusV % Lo:Ik vkSj mi;ksfxrk e'khuh vuqokn vuqokn % ifjHkk"kk vkSj Lo:Ik	uoEcj dk pkSFkk lIrkg	f}rh; d{kk ijh{kk f}rh; iznr dk;Z ekSf[kd ijh{kk

	vfr y?kqRjkRed iz'uksÙkj lHkh ¼lkfgR;&dfork iz;kstu ewyd fgUnh½		
Revision	iqujko`fÙk	fnlEcj izFke lIrkg	

Department: Hindi

Name of Teacher : Dr. Madhulika **Class: B.A. III (5th Sem.)**

Subject: Hindi **Paper: Hindi Comp.**

Section : B, C

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	lfPpnkuan ghjkuan okRL;k;u *vKs;*] /keZohj Hkkjrh] ujs'k egrk] ukxktqZu] j?kqohj lgk;] dqiojukjk;.k] yhyk/kj txwM+h	vxLr ds nwljs lIrkg ls vDrwcj ds vafre lIrkg	izFke iznr dk;Z izFke d{kk ijh{kk vxLr vkf[kjh lIrkg
Unit-2	fgUnh lkfgR; dk vk/kqfud dky % dfork vk/kqfud fgUnh dfork dk dzfed fodkl vk/kqfud fgUnh dfork lkfgR; dh ifjfLFkfr;ka HkkjrsUnq ;qxhru fgUnh dfork dh izo`fr;k	uoEcj ds izFke] f}rh;] r`rh; lIrkg rd	ekSf[kd ijh{kk iznr dk;Z

	f}osnh ;qxhu izo`fr;ka] Nk;koknh izxfrokn iz;ksxokn ubZ dfork] ledkyhu dfork ¼iz'uksÙkj½		
Unit-3	iz'uksÙkj] i= ys[ku] la{ksi.k] iYyou] iz'uksÙkj] y?kqrjkRed iz'uksÙkj] vfr y?kqrjkRed iz'uksÙkj	uoEcj pkSFkk lIrkg	f}rh; d{kk ijh{kk f}rh; iznr dk;Z ekSf[kd ijh{kk
Revision	iqujko`fÙk	fnlEcj izFke lIrkg	

Department: Hindi

Name of Teacher : Rajender Kumar **Class: B.A. I (Ist Sem.)**
Subject: Hindi **Paper: Hindi Comp.**
Section : A

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	lizlax O;k[;k dchjnkl] lwjnkl] rqylhnkl] ehjkckbZ] fcgkjh yky] ?kukuan] jl[kku	vxLr ds vafre lIrkg ls vDrwcj ds vafre lIrkg rd	izFke iznr dk;Z izFke d{kk ijh{kk vkf[kjh lIrkg rd
Unit-2	fgUnh lkfgR; dk vkfndky % iz'uksÙkj] bfrgkl ys[ku ijEijk] ukedj.k dh leL;k] ifjfLFkfr;ka] izo`fÙk;ka] jklks dkO;	uoEcj ds izFke] lIrkg ls fnlEcj ds izFke lIrkg rd	ekSf[kd ijh{kk iznr dk;Z
Unit-3	dkO;&'kkL= % iz'uksÙkj dkO; ds rRo] jl Hksn] vyadkj] 'kCn&'kfDr] dkO; xq.k] Nun] y?kqrjkRed iz'uksÙkj] vfr y?kqrjkRed iz'uksÙkj	fnlEcj ds f}rh; lIrkg rd	f}rh; d{kk ijh{kk iznr dk;Z f}rh;

Revision	iqujko`fÙk	fnlEcj ds r`rh; lIrkg rd	

Department: Hindi

Name of Teacher : Rajender Kumar **Class: B.A. II (3rd Sem.)**
Subject: Hindi **Paper: Hindi Comp.**
Section : B, C

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	lizlax O;k[;k v;ks/;k flag mik/;k;] eSfFkyh'kj.k xqIr] t;'kadj izlkn] lw;Zdkar f=ikBh fujkyk] egknsoh oekZ] jke/kkjh flag fnudj] Hkkjr Hkw"k.k vxzoky	vxLr ds nwljs lIrkg var ls vDrwcj ds vafre lIrkg rd	izFke iznr dk;Z izFke d{kk ijh{kk vkf[kjh lIrkg rd vxLr
Unit-2	fgUnh lkfgR; iz'uksÙkj dk jhfrdky] fgUnh dfork dh i`"BHkwfe ukedj.k] jhfrdkRe izo`fr;ka] jhfrc) dkO;] jhfreqDr dkO;] jhfrdkyhu dkO; dh miyfC/k;ka] y?kqrjkRed Ikz'u	uoEcj ds izFke] lIrkg ls rhljs lIrkg rd	ekSf[kd ijh{kk iznr dk;Z
Unit-3	iz;kstuewyd fgUnh % iz'uksÙkj daI;wfVd vkSj vuqokn dEI;wVj % Lo:Ik vkSj egRo bZesy % izs"k.k&xzg.k baVjusV % Lo:Ik vkSj mi;ksfxrk e'khuh vuqokn vuqokn % ifjHkk"kk vkSj Lo:Ik	uoEcj dk pkSFkk lIrkg	f}rh; d{kk ijh{kk f}rh; iznr dk;Z ekSf[kd ijh{kk

	vfr y?kqRjkRed iz'uksÙkj lHkh ¼lkfgR;&dfork iz;kstu ewyd fgUnh½		
Revision	iqujko`fÙk	fnlEcj izFke lIrkg	

Department: Hindi

Name of Teacher : Rajender Kumar **Class: B.A. III (5th Sem.)**

Subject: Hindi **Paper: Hindi Comp.**

Section : A

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	lfPpnkuan ghjkuan okRL;k;u *vKs;*] /keZohj Hkkjrh] ujs'k egrk] ukxktqZu] j?kqohj lgk;] dqiojukjk;.k] yhyk/kj txwM+h	vxLr ds nwljs lIrkg ls vDrwcj ds vafre lIrkg	izFke iznr dk;Z izFke d{kk ijh{kk vxLr vkf[kjh lIrkg
Unit-2	fgUnh lkfgR; dk vk/kqfud dky % dfork vk/kqfud fgUnh dfork dk dzfed fodkl vk/kqfud fgUnh dfork lkfgR; dh ifjfLFkfr;ka HkkjrsUnq ;qxhru fgUnh dfork dh izo`fr;k	uoEcj ds izFke] f}rh;] r`rh; lIrkg rd	ekSf[kd ijh{kk iznr dk;Z

	f}osnh ;qxhu izo`fr;ka] Nk;koknh izxfrokn iz;ksxokn ubZ dfork] ledkyhu dfork ¼iz'uksÙkj½		
Unit-3	iz'uksÙkj] i= ys[ku] la{ksi.k] iYyou] iz'uksÙkj] y?kqrjkRed iz'uksÙkj] vfr y?kqrjkRed iz'uksÙkj	uoEcj pkSFkk lIrkg	f}rh; d{kk ijh{kk f}rh; iznr dk;Z ekSf[kd ijh{kk
Revision	iqujko`fÙk	fnlEcj izFke lIrkg	

Department of Physics

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department:

Name of Teacher: Mr. Sombir
Class: B. Sc. 1st (Maths) Hons
Subject: Physics
Paper: Mechanics, BPL 101

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	**Fundamentals of Dynamics**: Reference frames. Inertial frames; Review of Newton's Laws of Motion. Galilean transformations; Galilean invariance. Momentum of variable mass system: motion of rocket. Motion of a projectile in Uniform gravitational field Dynamics of a system of particles. Centre of Mass. Principle of conservation of momentum. Impulse. **Work and Energy**: Work and Kinetic Energy Theorem. Conservative and non-conservative forces. Potential Energy. Energy diagram. Stable	2nd week of October to 4th week of October	

	and unstable equilibrium. Elastic potential energy. Force as gradient of potential energy. Work & Potential energy. Work done by nonconservative forces. Law of conservation of Energy. **Collisions:** Elastic and inelastic collisions between particles. Centre of Mass and Laboratory frames.		
Unit-2	**Rotational Dynamics**: Angular momentum of a particle and system of particles. Torque. Principle of conservation of angular momentum. Rotation about a fixed axis. Moment of Inertia. Calculation of moment of inertia for rectangular, cylindrical and spherical bodies. Kinetic energy of rotation. Motion involving both translation and rotation. **Elasticity**: Relation between Elastic constants. Twisting torque on a Cylinder or Wire. **Fluid Motion**: Kinematics of Moving Fluids: Poiseuille's Equation for Flow of a Liquid through a Capillary Tube	4^{th} week of October to 1 st week of November	1st Assignment
Unit-3	**Gravitation and Central Force Motion**: Law of gravitation. Gravitational potential energy. Inertial and gravitational mass. Potential and field due to spherical shell and solid sphere. Motion of a particle under a central force field. Two-body problem and its reduction to onebody problem and its solution. The energy equation and energy diagram. Kepler's Laws. Satellite in circular orbit and applications. Geosynchronous orbits. Weightlessness. Basic idea of global positioning system (GPS). **Oscillations**: SHM: Simple Harmonic Oscillations. Differential equation of SHM and its solution. Kinetic energy, potential energy, total energy and their time-average values. Damped oscillation. Forced oscillations: Transient and steady states; Resonance, sharpness of resonance; power dissipation and Quality Factor.	1^{st} week of November to 2^{nd} week of November	1st Minor Test

Unit-4	**Special Theory of Relativity**: Michelson-Morley Experiment and its outcome. Postulates of Special Theory of Relativity. Lorentz Transformations. Simultaneity and order of events. Lorentz contraction. Time dilation. Relativistic transformation of velocity, frequency and wave number. Relativistic addition of velocities. Variation of mass with velocity. Massless Particles. Mass-energy Equivalence. Relativistic Doppler effect. Relativistic Kinematics. Transformation of Energy and Momentum.	2^{nd} week of November to 4^{th} week of November	2nd Assignment 2nd Minor Test
Revision		4^{th} week of November to Exams conduct	

Note: - Dr. Pawan Kumar, Dr. Tamanna Sethi & Mr. Surender will take the classes of the above said class during my (Mr. Sombir) training of PRCN-171 (SD) From 11 August 2022 to 26 October 2022.

Government College, Hansi

Unit Wise Lesson Plan for Odd Semester 2022-2023

Name of the Teacher: - Dr. Tamanna Rani

Class B.Sc. (First Semester) Subject: - Physics (CPL-102),

Paper- Mechanics-1 (Theory)

Unit	Description of Topics	Duration	Assignment/Test

Unit-1 **Vectors**	Scalar and vector fields, Derivatives of a vector with respect to a parameter, Gradient of a scalar field and its geometrical interpretation, Divergence and curl of a vector field, Laplacian operator, Vector identities ,Line, surface and volume integrals of Vector fields, Flux of a vector field, Gauss's divergence theorem, Stokes Theorem and their applications (no rigorous proofs) (Any mathematical physics book)	3rd week of August to 4thweek of August	First assignment in First week of September
Unit II: **Time derivative of vectors with examples**	Concepts of cartesian, polar and spherical coordinates, Motion in plane Polar Coordinates, velocity and acceleration in polar coordinates Dynamics Using Polar Coordinates, Momentum and Energy: Momentum, Conservation of momentum, Centre of mass, Centre of mass coordinates with examples , Motion of rockets , Work and energy, Conservation of energy .	1st week of September to 3rd week of September	Unit test in last week of September
Unit III: Dynamics of a system of particles	Elastic and inelastic collisions between particles , Centre of Mass and Laboratory frames, Rotational Motion: Angular velocity and angular momentum , Moment of inertia and parallel and perpendicular axis theorem , Moment of inertia of (a) thin uniform wire (b) Thin rectangular sheet (c) Rectangular slab (d) ring (e) disc (f) spherical shell (g) solid sphere (h) hollow sphere, Torque, Conservation of angular momentum, Angular momentum as vector, Coriolis forces and its effect on motion	4th week of September to 2nd week of October	Second assignment in last week of October
Unit IV Central force	Basics properties of central forces, Two body problem equivalent to one body problem and concept of reduced mass, Motion of a particle in a central force field (motion is in a plane, angular momentum is conserved, areal velocity is constant) , Kepler's Laws, Elasticity: Hooke's law - Stress-strain diagram - Elastic moduli, Poisson's Ratio, Relation between four elastic constants),	4^{th} week of October to first week of November	

	Bending moments, Bending of cantilever and centrally loaded beams		
Revision, solution of queries, active participation of students	**From second week of November to till Exams**		

Government College, Hansi

Unit Wise Lesson Plan for Odd Semester 2022-2023

Name of the Teacher: - Dr. Tamanna Rani

Class B.Sc. (First Semester), Subject: - Physics (CPL-103),

Paper- Electricity and Magnetism

Unit	Description of Topics	Duration	Assignment/Test
Unit-1 **Electrostatics**	Electrostatic Field, Electric flux, Gauss's theorem of electrostatics, Applications of Gauss theorem, Divergence and curl of electrostatic field and their physical significance, Electric potential, Electric potential as line integral of electric field , Calculation of electric field from potential, Energy stored in electrostatic field per unit volume.	3rd week of August to 4thweek of August	First assignment in First week of September
Unit II **Application of Electrostatics**	Laplace and Poisson's equations for the electrostatic field , Multi-pole expansion of potential due to arbitrary charge distribution, Dielectric medium, Polarization, Bound charges in a polarized dielectric and their physical interpretation, Electric displacement , Gauss's theorem in dielectrics , Parallel plate capacitor completely filled with dielectric, Susceptibility, Permittivity and dielectric constants.	1st week of September to 3rd week of September	Unit test in last week of September

Unit III Magnetism	Lorentz force law, Magnetic forces , Magnetostatics: BiotSavart's law & its applications (1) straight conductor (2) circular coil (3) solenoid carrying current , Divergence and curl of magnetic field , Ampere's circuital law and it's applications for simple current configurations , Magnetic vector potential.	4th week of September to 2nd week of October	Second assignment in last week of October
Unit IV Magnetization **Revision, solution of queries, active participation of students**	The field of a magnetized object, bound currents, physical interpretation of bound currents , Ampere's law for magnetized objects, The Auxiliary field (H) , Magnetic properties of materials , Permeability, Magnetic susceptibility , diamagnetism, para-magnetism and ferromagnetism, B-H Curve , Currie point	4th week of Oct.to first week of Nov. **From From Second week of November to till Exams**	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2022-23

Department: Physics

Name of Teacher: Dr. Pawan Kumar Class: B.Sc. III NM

Subject: Element of Modern Physics Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to Quantisation:Properties of Thermal Radiation, Spectral Distribution of Blackbody Radiation, Kirchhoff's Law, Radiation: Experimental Verification. Photo-electric effect and Compton scattering; Pair production	16 August 2022 to 25 Aug2022	1st assignment in the last week of September

Unit-2	Bohr Model: Drawbacks of Rutherford model, Bohr atomic model; Bohr's quantization rule and atomic stability; Calculation of energy levels for hydrogen Fundamentals of Wave Mechanic experiment, phase velocity, group velocity and their relations.	26 Aug 2022 to 9 September 2022	Test in the last Week of September
Unit-3	Heisenberg Uncertainty Principle; Estimating minimum energy of a confined Physical Interpretation of wave-function. Schrodinger Equation:Momentum and Schrodinger Equation, Particle in1-dimention infinite potential well	10 September 2022 to 22 Sep 2022	2nd Assignment in the First Week of October
Unit-4	LASER:Absorption and emission of radiation (qualitative only); Basic features of LASER, Population inversion; Resonance cavity; laser pumping; Basic principle and working of He-Ne LASER and Ruby LASER, Applications of LASER.	23 Sep 2022 to 8 Oct 2022	
Revision	Unit 1, Unit II, Unit III and Unit IV	7 dec 2022 to 10 December 2022	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2022-23

Department: Physics

Name of Teacher: Dr. Pawan Kumar Class:B.Sc. III(NM)

Subject: Nuclear Physics Paper:

Program	Description of Chapter / Topics	Duration	Assignment / Test
1	Basic Properties of Nuclei: Nuclear composition (p-e and p-n hypotheses), Nuclear properties; Nuclear mass, size, spin, parity,Radioactivity: Law of Radioactive Decay, Half-life, Radioactive Series	9 Oct 2022 to 24 Oct 2022	

2	Nuclear Models and Nuclear Forces: Similarity between nuclear matter and liquid drop, Semi-classical Mass formula, Limitations of liquid drop model, Magic number, Experimental signature of shell	25 Oct 2022 to 12 Nov 2022	Assignment
3	Radiation Interaction: Interaction of heavy charged particles (proton, Alpha particles etc.); Energy loss,Nuclear Reactions: Types of nuclear reactions	13 Nov 2022 to 25 November 2022	Test
4	Nuclear Radiation Detectors: Gas filled counters; Ionization chamber, proportional counter, G.M. Counter (detailed study), Basic principle of scintillation counter Nuclear Reactors	26 November 2022 to 10 December 2022	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2022-23

Department: Deppt of Physics

Name of Teacher: Mr Surender Singh Class: B.Sc. 2nd year

Subject: Physics Paper: Semiconductor Devices

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	P and N type semiconductors. Barrier Formation in PN Junction Diode, Drift and Diffusion Currents, Current flow mechanism in Forward and Reverse biased PN Junction Diodes mentioning the roles of drift and diffusion currents, V-I characteristics of PN Junction Diode, Static and Dynamic Resistance, Applications of PN Junction Diode as Half-wave rectifier, Full-wave Rectifier (both center-tapped and bridge FWR),Calculation of ripple factor and rectification efficiency, Zener Diode, Applications of Zener Diode as DC voltage	2rd week of August to 4th week of August	

	Regulator, Principle and structure of ,LEDs , Photodiode , Solar Cell		
Unit-2	Semiconductor Transistors: Bipolar Junction transistors: n-p-n and p-n-p Transistors, Biasing of transistors in Active, Cutoff, and Saturation Modes, Circuit configurations of CB ,CE and CC transistors, characteristics of transistors in CB,CE and CC, Current gains α and β. Relations between α and β, Current gain and power gain, DC Load line and Q- poin	1st week of Sept. to 3rd week of September	Unit 1st test and Assignment
Unit-3	Amplifiers and Their Biasing: Voltage Divider Bias Circuit for CE Amplifier, bias stabilization, Class-A, B &C amplifiers, RC coupled amplifiers and its frequency response, Feedback in amplifiers, positive and negative feedback in amplifiers, Advantages of negative feedback in amplifiers, Sinusoidal Oscillators: Barkhausen's Criterion for Self-sustained oscillations, Circuit and working of Hartley oscillator, Circuit and working of Colpit's oscillator, Uses of	3rd week of September to 4th week of September	

Unit-4	Operational Amplifiers (Black Box approach): Qualitative idea of differential amplifier, CMRR, Characteristics of an Ideal and Practical Op-Amp (IC 741), Open-loop& Closed-loop Gain. concept of Virtual ground, Applications of Op-Amps as Inverting Amplifier, Non inverting Amplifier, Differentiator, Integrator	1st week of October to 2nd week of october	
Revision	All units problems and doubts taken	4th week of November to Exams conduts	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department: Deppt of Physics

Name of Teacher: Mr Surender Singh

Class: B Sc 2nd year

Subject: Physics

Paper: Heat and Thermodynamics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Zeroth and First Law of Thermodynamics: Extensive and intensive thermodynamic variables, Thermodynamic equilibrium, Zeroth law and Concept of Temperature, Work and heat, State function, First law of thermodynamics, Internal energy, Applications of first law, General relation between Cp and Cv, Work done during isothermal and adiabatic Processes . Second Law of Thermodynamics: Reversible and Irreversible process with examples, Conversion of Work into Heat and Heat into Work, Heat Engines, Carnot's Cycle, Carnot engine & efficiency, Refrigerator & coefficient of performance, 2nd Law of Thermodynamics: Kelvin-Planck and Clausius Statements and their Equivalence, Carnot's Theorem	2nd week of October to 4th week of October	
Unit-2	Entropy and Third law of Thermodynamics: Concept of entropy, Clausius theorem, Clausius Inequality,Second Law of Thermodynamics in terms of Entropy, Entropy of a Perfect Gas and Universe, Entropy Changes in Reversible and Irreversible Processes, Principle of Increase of Entropy, Third Law of Thermodynamics, T-S Diagrams, Phase Change, Classification of Phase Changes.	4th week of October to 1 st week of November	Uniot 2nd amd 3rd test and Assignment

Unit-3	Thermodynamic Potentials :- Extensive and Intensive Thermodynamic Variables, Internal Energy, Enthalpy, Gibbs, Helmholtz function and Their Definitions, Properties and Applications. Maxwell's Thermodynamic Relations: - Derivations of Maxwell's Relations. Applications of Maxwell's Relations: (1) ClausiusClapeyron equation, (2) Values of CP – CV, (3) Energy equations (4) Change of temperature during adiabatic process.	1st week of November to 2nd week of November	
Unit-4	Real gases: - Behaviour of Real Gases, Deviations from the Ideal Gas Equation. The Virial Equation, Critical Constants. Continuity of Liquid and Gaseous State. Vapour and Gas, Boyle Temperature, Van der Waal's Equation of State for Real Gases. Values of Critical Constants. Law of Corresponding States. Comparison with Experimental Curves, p-V Diagrams, Joule's Experiment, Free Adiabatic Expansion of a Perfect Gas.	2nd week of November to 4th week of November	

Revision	All units problems and doubts taken	4th week of November to Exams conduts	

Department of Geography

Government College, Hansi……Unit wise Lesson Plan for the Odd Semester, 2022-23
Name of the Teacher: **Dr. Raj Kumar**
Class: **B.A. 5th Semester** Subject: **Geography** Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Definition, Nature, Scope and Approaches of Economic Geography. Relationship of Economic Geography with Economics and Other Branches of Social Sciences. Main Concept of Economic Geography; Resources Concept and Classification; Resource and Conservation.	3rd Week of August to 2nd Week of September	
Unit 2	Factors Affecting Location of Economic Activity with special reference to Agriculture	3rd Week of September to	1st Assignment

	(Von Thunen Theory), Industry (Weber's Theory).	1st Week of October	
Unit 3	Subsistence and Commercial Agriculture (Rice, Wheat, Cotton, Sugarcane, Tea, Rubber and Coffee). Manufacturing (Cotton Textile, Iron and Steel), Concept of Manufacturing Regions, Special Economic Zones and Technology Parks.	2nd Week of October to 2nd Week of November	Class Test
Unit 4	World Transportation: Major Trans-Continental Railways and Sea Routes, Geo-Economic Factors in their Development. WTO and International Trade, Patterns and Trends; Major Trade Blocks; Effect of Globalization on Developing Countries.	3rd Week of November to 4th Week of November	2nd Assignment
Revision	All Four Units	1st Week of December	

Government College, Hansi……Unit wise Lesson Plan for the Odd Semester, 2022-23
Name of the Teacher: **Dr. Raj Kumar**
Class: **B.A. 5th Semester** Subject: **Geography** Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Principals of Map Design and Layout. Symbolization: Point, Line and Area Symbols. Lettering and Toponomy. Mechanics of Map Construction.	3rd Week of August to 1st Week of September	…..
Unit 2	Distribution Maps: Qualitative Maps	2nd Week of September to 4th Week of September	….
Unit 3	Distribution Maps: Quantitative Maps	1st Week of October to 2nd Week of November	….
Unit 4	Prismatic Compass Survey	3rd Week of November to 1st Week of December	…..

Government College, Hansi. Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher**. Sh Sandeep Singh**

Class**: B.A 2nd 3rd Semester** Subject : **Geography** Paper : **Theory**

Unit	Description of Chapters/Topic	Duration	Assignment/Test
Unit 1	Weather and Climate; Origin, composition and structure of atmosphere. Insolation, Global heat budget, Horizontal and vertical distribution of temperature, inversion of temperature	2nd Week of August to 2nd Week of September	1st Assignment in 2nd Week of September
Unit 2	Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon, Jet Streams EL NINO- LA NINA Phenomenon. Humidity- measurement and variables, evaporation, condensation, precipitation types and distribution, hydrological cycle.	3rd Week of September to 2nd Week of October	Minor Test in the 1st Week of October
Unit 3	Air masses- concept and classification; Fronts- types and characteristics, Weather distribution tropical and extra tropical cyclones. Climate classification by Koppen; climate change and global warming.	3rd Week of October to 1st Week of November	2nd Assignment in the 1st Week of November
Unit 4	Configuration of oceanic floors and surface relief of Pacific, Atlantic and Indian oceans; Temperature and salinity of oceans. Tides, waves and oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.	2nd Week of November to end of semester	……

Government College, Hansi. Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher**. Sh Sandeep Singh**

Class**: B.A 2nd 3rd Semester** Subject : **Geography** Paper : **Practical**

Unit	Description of Chapters/topics	Duration	Assignment/Test
Unit 1	Measurement of temperature, rainfall, pressure and humidity. Representation of temperature and Rainfall.	2nd Week of August to 2nd Week of September	….
Unit 2	Line and Bar graph, Distribution of Temperature and Rainfall, Hythergraph, Rainfall deviation diagram	3rd Week of September to 2nd Week of October	….
Unit 3	Climograph (Wet and dry places) Distribution of pressure(180 bars)	3rd Week ofF October to 1st Week of November	…..
Unit 4	Weather map Interpretation (January and July)	2nd Week of November to end of Semester	…

Govt. college Hansi

Lesson plan

Unit wise lesson plan for the odd Semester, 2022-23.

Teacher: Sandeep Singh Class: B.C.A 1st Year

Subject: Environmental Studies

Unit	Description of chapters/topics	Duration	Assignment/ Test

Unit 1	Multidisciplinary nature of environmental studies: Definition, scope and importance, need for public awareness, Concept, structure and function of ecosystem: producers, consumers and decomposers, Energy flow in the ecosystem Ecological succession, Food chains, Food webs and ecological pyramids, Introduction, characteristics, features, structure and function of different ecosystem such as forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystem. Biodiversity: Introduction, Definition: genetic spices and ecosystem diversity, bio-geographical classification of India, Ecosystem & biodiversity services: ecological, economic, social, consumptive use, productive use, social ethical, aesthetic and options values,Biodiversity at global, national and local level, India as a mega diversity nation Global Hot spotof biodiversity, threats to biodiversity, habit loss, poaching of wildlife, man wildlife conflicts, Biological invasions, Endangered and endemic spices of India, Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity	Last Week of August to 2nd Week of September	1st Assignment in the 3rd week of September
Unit 2	Renewable and renewable resources, Natural resources and associated problems, Forest resources: Use and over exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forest and tribal people, Water resources , use and over utilization of surface and ground water, floods, droughts conflicts over water dams benefits and problems, Mineral resources, Use and exploitation, environmental effects of extracting and mineral resources, food resources, World food resources, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer- pesticide problems, water logging, salinity, Energy resources: Growing energy needs, renewable and renewable energy resources, use of alternate energy resources, case studies, land resources, land as a resources, land degradation, man induced landslides, soil erosion and desertification	3rd Week of September to 4th Week of September	Minor Test in the 1 Week of October

Unit 3	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution, Water Pollution, soil pollution, noise pollution, Nuclear hazards and human health risks Solid waste management, Causes, effects and control measures of urban and industrial wastes, Pollution case studies, Disaster Management: Floods, Earthquake, Cyclone and landslides, climate changes, global warming, acid rain, ozone layer depletion, different laws related to environment: Environment Protection Act, Air (Prevention and control of pollution) Act, Water (Prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act, International agreement, Montréal and Kyoto Protocol and nature reserve, tribal population and human health	1st Week of October to 3rd Week of October	2nd Assignment in the 2nd Week of November
Unit 4	Concept of sustainability & sustainable development, water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of project affected persons, case studies, Environmental ethics, role of Indian and other religions and cultures in environmental conservation, Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi) Human Population growth: Impact on environment, human health and welfare, Environmental movements, Chipko, Silent valley, Bishnois of Rajasthan. ,	4th Week of October to 4th week of November	…….
Revision	Revision, presentation, problem solving	Onwards	…….

Lesson plan

Unit wise lesson plan for the odd Semester, 2022-23.

Teacher: Jitin Class: B.com 1st Year

Subject: Environmental Studies

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Multidisciplinary nature of environmental studies: Definition, scope and importance, need for public awareness, Concept, structure and function of ecosystem: producers, consumers and decomposers, Energy flow in the ecosystem Ecological succession, Food chains, Food webs and ecological pyramids, Introduction, characteristics, features, structure and function of different ecosystem such as forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystem. Biodiversity: Introduction, Definition: genetic spices and ecosystem diversity, bio-geographical classification of India, Ecosystem & biodiversity services: ecological, economic, social, consumptive use, productive use, social ethical, aesthetic and options values,Biodiversity at global, national and local level, India as a mega diversity nation Global Hot spotof biodiversity, threats to biodiversity, habit loss, poaching of wildlife, man wildlife conflicts, Biological invasions, Endangered and endemic spices of India, Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity	Last Week of August to 2nd Week of September	1st Assignment in the 3rd week of September
Unit 2	Renewable and renewable resources, Natural resources and associated problems, Forest resources: Use and over exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forest and tribal people, Water resources , use and over utilization of surface and ground water, floods, droughts conflicts over water dams benefits and problems, Mineral resources, Use and exploitation, environmental effects of extracting and mineral resources, food resources,	3rd Week of September to 4th Week of September	Minor Test in the 1 Week of October

	World food resources, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer- pesticide problems, water logging, salinity, Energy resources: Growing energy needs, renewable and renewable energy resources, use of alternate energy resources, case studies, land resources, land as a resources, land degradation, man induced landslides, soil erosion and desertification		
Unit 3	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution, Water Pollution, soil pollution, noise pollution, Nuclear hazards and human health risks Solid waste management, Causes, effects and control measures of urban and industrial wastes, Pollution case studies, Disaster Management: Floods, Earthquake, Cyclone and landslides, climate changes, global warming, acid rain, ozone layer depletion, different laws related to environment: Environment Protection Act, Air (Prevention and control of pollution) Act, Water (Prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act, International agreement, Montréal and Kyoto Protocol and nature reserve, tribal population and human health	1st Week of October to 3rd Week of October	2nd Assignment in the 2nd Week of November
Unit 4	Concept of sustainability & sustainable development, water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of project affected persons, case studies, Environmental ethics, role of Indian and other religions and cultures in environmental conservation, Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi) Human Population growth: Impact on environment, human health and welfare, Environmental movements, Chipko, Silent valley, Bishnois of Rajasthan. ,	4th Week of October to 4th week of November	…….
Revision	Revision, presentation, problem solving	Onwards	…….

Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher: Jitin

Class: **B.A. 1st Semester** Subject: **Geography** Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 2	Population: Distribution, Density, Growth and Composition. Production and distribution of crops: Rice, wheat, cotton and sugarcane with special reference to Haryana, Green Revolution.	Last Week of August to 2nd Week of September	1st Assignment in the 3rd week of September
Unit 3	Energy and Mineral Resources - Coal, Petroleum, Solar, Hydroelectricity and Nuclear Energy. Mineral Resources:- Iron Ore, Manganese, Aluminium and Mica	3rd Week of September to 4th Week of September	Minor Test in the 1 Week of October
Unit 4	Industries - Iron and steel, cotton textile, sugar and industrial regions of India with special reference to Haryana. Transport and communication, Modes of transport:- Road, Railway, Water.	1st Week of October to 3rd Week of October	----------
Unit 1	India: Location, relief and drainage systems. Climate, soils, natural vegetation and natural disasters in India.	4th Week of October to 4th week of November	2nd Assignment in the 2nd Week of November
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Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher: Jitin

Class: **B.A. 1st Semester** Subject: **Geography** Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Introduction to Cartography	Last Week of August to 2nd Week of September	…..
Unit 2	Maps & Their Types	3rd Week of September to 4th Week of September	….
Unit 3	Map Scales- Methods of Representing Scales, Conversion of Statement of Scale into R.F. and Vice Versa	1st Week of October to 3rd Week of October	….
Unit 4	Plain Scales, Comparative Scales, Time Scales, Diagonal Scales; Measurement of Distances and Area on Maps & Enlargement and Reduction of Maps	4th Week of October to 4th week of November	…..

Government College, Hansi. Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher**. Sh Virender Sihag**

Class**: B.A 2nd 3rd Semester** Subject : **Geography** Paper : **Theory**

Unit	Description of Chapters/Topic	Duration	Assignment/Test
Unit 1	Weather and Climate; Origin, composition and structure of atmosphere. Insolation,	2nd Week of August to 2nd	1st Assignment in 2nd Week of September

	Global heat budget, Horizontal and vertical distribution of temperature, inversion of temperature	Week of September	
Unit 2	Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon, Jet Streams EL NINO- LA NINA Phenomenon. Humidity- measurement and variables, evaporation, condensation, precipitation types and distribution, hydrological cycle.	3rd Week of September to 2nd Week of October	Minor Test in the 1st Week of October
Unit 3	Air masses- concept and classification; Fronts- types and characteristics, Weather distribution tropical and extra tropical cyclones. Climate classification by Koppen; climate change and global warming.	3rd Week of October to 1st Week of November	2nd Assignment in the 1st Week of November
Unit 4	Configuration of oceanic floors and surface relief of Pacific, Atlantic and Indian oceans; Temperature and salinity of oceans. Tides, waves and oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.	2nd Week of November to end of semester	……

Government College, Hansi. Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher**. Sh Virender Sihag**

Class**: B.A 2nd 3rd Semester** Subject : **Geography** Paper : **Practical**

Unit	**Description of Chapters/topics**	**Duration**	**Assignment/Test**
Unit 1	Measurement of temperature, rainfall, pressure and humidity. Representation of temperature and Rainfall.	2nd Week of August to 2nd Week of September	**….**
Unit 2	Line and Bar graph, Distribution of Temperature and Rainfall, Hythergraph, Rainfall deviation diagram	3rd Week of September to 2nd Week of October	**….**
Unit 3	Climograph (Wet and dry places) Distribution of pressure(180 bars)	3rd Week ofF October to 1st Week of November	**…..**
Unit 4	Weather map Interpretation (January and July)	2nd Week of November to end of Semester	**…**

Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2022-23
Name of the Teacher: Dharmvir
Class: **B.A. 1st Semester** Subject: **Geography** Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 2	Population: Distribution, Density, Growth and Composition. Production and distribution of crops: Rice, wheat, cotton and sugarcane with special reference to Haryana, Green Revolution.	Last Week of August to 2nd Week of September	1st Assignment in the 3rd week of September
Unit 3	Energy and Mineral Resources - Coal, Petroleum, Solar, Hydroelectricity and Nuclear Energy. Mineral Resources:- Iron Ore, Manganese, Aluminium and Mica	3rd Week of September to 4th Week of September	Minor Test in the 1 Week of October
Unit 4	Industries - Iron and steel, cotton textile, sugar and industrial regions of India with special reference to Haryana. Transport and communication, Modes of transport:- Road, Railway, Water.	1st Week of October to 3rd Week of October	----------
Unit 1	India: Location, relief and drainage systems. Climate, soils, natural vegetation and natural disasters in India.	4th Week of October to 4th week of November	2nd Assignment in the 2nd Week of November
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Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2022-23

Name of the Teacher: Dharmvir

Class: **B.A. 1st Semester** Subject: **Geography** Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Introduction to Cartography	Last Week of August to 2nd Week of September	…..
Unit 2	Maps & Their Types	3rd Week of September to 4th Week of September	….
Unit 3	Map Scales- Methods of Representing Scales, Conversion of Statement of Scale into R.F. and Vice Versa	1st Week of October to 3rd Week of October	….
Unit 4	Plain Scales, Comparative Scales, Time Scales, Diagonal Scales; Measurement of Distances and Area on Maps & Enlargement and Reduction of Maps	4th Week of October to 4th week of November	…..

Govt. college Hansi

Lesson plan

Unit wise lesson plan for the odd Semester, 2022-23.

Teacher:Virender Sihag **Class: B.Sc(NM) & B.Sc(Hons) 1st Year**

Subject: Environmental Studies

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Multidisciplinary nature of environmental studies: Definition, scope and importance, need for public awareness, Concept, structure and function of ecosystem: producers, consumers and decomposers, Energy flow in the ecosystem Ecological succession, Food chains, Food webs and ecological pyramids, Introduction, characteristics, features, structure and function of different ecosystem such as forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystem. Biodiversity: Introduction, Definition: genetic spices and ecosystem diversity, bio-geographical classification of India, Ecosystem & biodiversity services: ecological, economic, social, consumptive use, productive use, social ethical, aesthetic and options values,Biodiversity at global, national and local level, India as a mega diversity nation Global Hot spotof biodiversity, threats to biodiversity, habit loss, poaching of wildlife, man wildlife conflicts, Biological invasions, Endangered and endemic spices of India, Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity	Last Week of August to 2nd Week of September	1st Assignment in the 3rd week of September
Unit 2	Renewable and renewable resources, Natural resources and associated problems, Forest resources: Use and over exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forest and tribal people, Water resources , use and over utilization of surface and ground water, floods, droughts conflicts over water dams benefits and problems, Mineral resources, Use and exploitation, environmental effects of extracting and mineral resources, food resources, World food resources, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer- pesticide problems, water logging, salinity, Energy resources: Growing energy needs, renewable and renewable energy resources, use of alternate energy resources, case studies, land resources, land as a resources, land degradation,	3rd Week of September to 4th Week of September	Minor Test in the 1 Week of October

	man induced landslides, soil erosion and desertification		
Unit 3	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution, Water Pollution, soil pollution, noise pollution, Nuclear hazards and human health risks Solid waste management, Causes, effects and control measures of urban and industrial wastes, Pollution case studies, Disaster Management: Floods, Earthquake, Cyclone and landslides, climate changes, global warming, acid rain, ozone layer depletion, different laws related to environment: Environment Protection Act, Air (Prevention and control of pollution) Act, Water (Prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act, International agreement, Montréal and Kyoto Protocol and nature reserve, tribal population and human health	1st Week of October to 3rd Week of October	2nd Assignment in the 2nd Week of November
Unit 4	Concept of sustainability & sustainable development, water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of project affected persons, case studies, Environmental ethics, role of Indian and other religions and cultures in environmental conservation, Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi) Human Population growth: Impact on environment, human health and welfare, Environmental movements, Chipko, Silent valley, Bishnois of Rajasthan. ,	4th Week of October to 4th week of November	…….
Revision	Revision, presentation, problem solving	Onwards	…….

Department of Physical Education

Lesson Plan

Government College, Hansi Unit wise Lesson Plan for **odd semester 2022-23**

Name of Teacher: **Rajni Saini**

Class: **BA III (5th Sem.)** Subject: Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Growth and development	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	Concept of sports organization and administration.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Concepts of posture.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Anatomy and physiology of muscular system	27 October 2022 to 19 November 2022	
Revision		21 November 2022 to 7 December 2022	

Lesson Plan

Government College, Hansi Unit wise Lesson Plan for **Odd Semester 2022-23**

Name of Teacher: **Rajni Saini**

Class: **BA 1st(1st Sem.)** **Subject: Physical Education**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction of Physical education- Meaning, definition, scope, aim, objective, importance, misconception of physical education	25 August 2022 to 20 September 2022	1st assignment in the 3rd week of September
Unit-2	Health and hygiene	21 September 2022 to 20 October 2022	Minor Test in the Last Week of September
Unit-3	Introduction of Yoga	21 October 2022 to 20 November 2022	2nd Assignment in the Last Week of October
Unit-4	Human anotomy and physiology of cell, tissue, organ and system	21 November 2022 to 20 December 2022	
Revision		21 December 2022 to 26 December 2022	

Lesson Plan

Government College, Hansi Unit wise Lesson Plan for **Odd Semester 2022-23**

Name of Teacher: **Rajni Saini**

Class: **BAII (3rd Sem.)** Subject: Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Concept of safety education. Sports injury. Principals, prevention, general treatment for sports injury.	16 August 2022 to 10 September 2022	1st assignment in the last week of September
Unit-2	Common dieses- communicable and non communicable.	12 September 2022 to 30 September 2022	Minor Test in the last Week of September
Unit-3	Concept of balanced diet.	1 October 2022 to 21 October 2022	2nd Assignment in the First Week of October
Unit-4	Anotomy and physiology of circulatory system.	27 October 2022 to 19 November 2022	
Revision		21 November 2022 to 7 December 2022	

Department of Political Science

Government College Hansi

Unit wise Lesson Plan for session 2020-2021

Name of Teacher: **Babita Chaudhary** Class: **B.A. 1st Semester**

Subject: **Political Science** Paper: **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test

Unit 1	Indian Constitution	3rd week of Nov to 4th week of Dec	Verbal Test
Unit 2	Union Executive and state executive	1st week of Jan 1st week of Feb	1st Assignment in 2nd week of January
Unit 3	Union Legislature and State Legislature	2nd week of Feb to 1st week of March	Minor test in the 1st week of Feb
Unit 4	Judiciary	2nd week of March to 3rd week of March	2nd Assignment in the 3rd week of March
Revision	Revision, problem solving	4th week of March	

Head of the Department (Economics)

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2020-2021

Name of Teacher: **Babita Chaudhary** Class: **B.A. 5th Semester**

Subject: **Political Science** Paper: **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Comparative Politics; Definition, nature and scope	2nd week of Nov to 2nd week of Dec	Verbal Test
Unit 2	Approaches to the study of Comparative Politics	3rd week of Dec to 2nd week of Jan	1st Assignment in 1st week of January

Unit 3	Constitutionalism	3rd week of Jan to 1st week of Feb	Minor test in the last week of January
Unit 4	Constitutional structure	2nd week of Feb 2nd week of March	2nd Assignment in the 2nd week of Feb
Revision	Revision, problem solving	3rd and 4th week of March	

Head of the Department (Economics)

Department of Economics

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2022-23

Department:

Name of Teacher: Bhateri Class: B.A

Subject: Economics Paper: Principal Of Microeconomics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Nature and, scope of economics, the economics problem scarcity and choice, economics system: Characteristics and Function, Demand and Supply and market Equilibrium, Applications of Demand and Supply, Elasticity of Demand	3rd week of August to 3rd week of September	Verbal Test

Unit-2	Utility Analysis and Consumers Equilibrium, Indifference Curves Analysis and Consumers Equilibrium	4th week of Sept to 2nd of Oct	Assignment in 2nd week of august
Unit-3	Production Function and law of production, Isoquants and isocost Lines: producer Equilibrium, Elasticity of Supply	3rd week of Oct to 2nd week November	Minor test in the 1st week of Nov
Unit-4	Theory of cost, Concepts of Revenue, break even Points and its uses	3rd week of Nov to 4th week of November	2nd Assignement in the last week of November
Revision			

	Revision and problem solving	1st week of December	

Department: Economics

Name of Teacher: Bhateri Class: B.A

Subject: Economics Paper: Principal Of Macroeconomics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction of Macroeconomics, Circular flow of income, National Income :-Concept and measurement	3rd week of August to 1st week of September	--
Unit-2	Consumption Function, Investment Function, Investment Multiplier	2nd week of Sep. To 1st week of October	Class Test 3rd week of Sept
Unit-3		2nd week of Oct to 4th	Assignment-1st

	Classical and Keynesian theory of Income, Output and Employment, Say's Law of Market, Principal of Effective Demand	week of October	
Unit-4	Money:function and , Defination and roll, quantity theory of Money, Fisher equation and Cambridge equation, Liquidity theory of keynesian, Banking: Major Function of Commerical Bank and process of credit creation	1st week of Nov to 4th week of Nov	Verbal test and 2 nd assignment
Revision	Revision and problem solve	1st week of Dec.	

Department: Economics

Name of Teacher: Bhateri Class: B.A

Subject: Economics Paper: Development of Economics

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Economic Growth and Development, Development and underdevelopment Economic, Factors affecting economic growth	3rd week of August to 2nd week of September	Verbal Test

Unit-2	Poverty, Human Development Index, Population Problem and growth pattern of population in developing countries.	3rd week of Sept to 1st week of October	1st Assignment in 4th week of Sept.
Unit-3	Traditional Measurement of Economics Development- National Income, Per Capita Income, UNDP, Classical theory of Development	2nd week of Oct to 4th week of Oct	Class test in 3rd week of Oct.
Unit-4	Steady State Growth Models – Harrod Domer, Neo Classical Model of Growth, Cambridge Model of Growth.	1st week of Nov 3rd week of Nov	2nd Assignment in the 2nd Week of November

Revision	Revision, problem solving	4th week of November to 1st week of Dec	

Department: Economics

Name of Teacher: Bhateri Class: M.Com
Subject: Economics Paper: Managerial Economics

Unit	**Description of Chapter / Topics**	**Duration**	**Assignment / Test**
Unit-1	Theory of demand and consumer equilibrium-utility and indifference curve approach; Demand Function; Elasticity of demand and its significance in managerial decision-making; Demand Forecasting and its techniques.	3rd week of Oct to 1st week of Nov	--
Unit-2	Theory of Cost: Types of cost: production cost, selling cost, R&D Cost, short run and long run cost Curves, relation between cost and revenue, break-even point; Economies and diseconomies of scale And scope; Production function : Short term and long run production function, law of	2nd week of Nov. To 4th week of November	1st Class Test 3rd week of November

	variable Proportion and return to scale, Iso-quant curves.		
Unit-3	Market Structure and Competition: Price and output determination under perfect competition, Monopoly, monopolistic competition and oligopoly.	1st week of Dec to 2nd week of Dec	Assignment-1st in 1st week of Dec
Unit-4	Modern theories of firm: Bamoul's theory of sales maximization, Managerial Theory, Behavioral Theory; National Income: Concept and Measurement.	3rd week of Dec to	2nd test and 2 nd assignment
Revision	Revision and problem solve	4th week of Dec.	Viva last week of Dec