Lesson Plan 2024-25

Government College, Hansi

Unit wise Lesson Plan for ODD Semester Aug.-Dec.-2024

Department: Computer Science

Name of Teacher: **Dr. Banta Singh Jangra** Class: **PGDCA (1st Sem.)**

Subject: **Introduction to Information Technology** 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.	08-Aug-24 To 23-Aug.-24	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.	24-Aug-24 To 10-Sept-24	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	11-Sept-24 To 30-Sept-24	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.	01-Oct-24 To 25-Oct-24	Mock Test
Revision	Revision of Syllabus and Students Query Handling with Sample Papers	26-Oct-24 To Exam Date	Seminar

Lesson Plan 2024-25

Government College, Hansi

Unit wise Lesson Plan for ODD Semester Aug.-Dec.-2024

Department: Computer Science

Name of Teacher: **Dr. Banta Singh Jangra** Class: **PGDCA (1st Sem.)**

Subject: **Data Base Management System** Paper: **PGDCA-104**

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 Instances, DBMS architecture and various views of Data, Data Independence, Database languages.	08-Aug-24 To 23-Aug.-24	Assignment-1
Unit-2	Entity Relationship Model: Basic Concepts-Entity, Attributes, Types of Attributes, Entity set and Keys, Relationships-Relationship set, Degree of Relationship, Roles and Structural Constraints, ER Diagrams, Reduction of an E-R Diagram to Tables, Binary Representation and Cardinality, Participation Constraints	24-Aug-24 To 10-Sept-24	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	11-Sept-24 To 30-Sept-24	Assignment-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).	01-Oct-24 To 25-Oct-24	Mock Test
Revision	Revision of Syllabus and Students Query Handling with Sample Papers	26-Oct-24 To Exam Date	Seminar

Unit wise Lesson Plan for Odd Semester 2024-25

Department: **Computer Science** Type: **DSC (Major)**

Name of Teacher: **Anil Kumar** Class: **BCA (First Sem)**

Subject: **Logical Organization of Computer** Paper: **C24CAP103T**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Number Systems: Binary, Octal, Hexadecimal etc. Conversions from one number system to another, BCD Number System. BCD Codes: Natural Binary Code, Weighted Code, Self-complimenting Code, Cyclic Code. Error Detecting and Correcting Codes. Character representations: ASCII, EBCDIC and Unicode. Number Representations: Integer numbers sign-magnitude, 1′s & 2′s complement representation. Real Numbers normalized floating point representations.	29/07/24 To 28/08/24	Assignment1
Unit-2	Binary Arithmetic: Binary Addition, Binary Subtraction, Binary Multiplication, Binary Division using 1′s and 2′s Compliment representations, Addition and subtraction with BCD representations. Boolean Algebra: Boolean Algebra Postulates, basic Boolean Theorems, Boolean Expressions, Boolean Functions, Truth Tables, Canonical Representation of Boolean Expressions: SOP and POS, Simplification of Boolean Expressions using Boolean Postulates & Theorems, Karnaugh-Maps (up to four variables), Handling Don′t Care conditions.	29/08/24 To 20/09/24	Test 1
Unit-3	Logic Gates: Basic Logic Gates- AND, OR, NOT, Universal Gates-NAND, NOR, Other Gates-XOR, XNOR etc. Their symbols, truth tables and Boolean expressions. Combinational Circuits: Design Procedures, Half Adder, Full Adder, Half Subtractor, Full Subtractor, Multiplexers, Demultiplexers, Decoder, Encoder, Comparators, Code Converters.	21/09/24 To 10/10/24	Assignment2
Unit-4	Sequential Circuits: Basic Flip- Flops and their working. Synchronous and Asynchronous Flip −Flops, Triggering of Flip- Flops, Clocked RS, D Type, JK, T type and Master-Slave Flip-Flops. State Table, State Diagram and State Equations. Flip-flops characteristics & Excitation Tables. Sequential Circuits: Designing registers −Serial-In Serial-Out (SISO), Serial-In Parallel-Out (SIPO), Parallel-In Serial-Out (PISO)	11/10/24 To 05/11/24	Test 2

	Parallel-In Parallel-Out (PIPO) and shift registers.		
	Revision	05/11/24 onward	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2024-25

Department: **Computer Science**
Name of Teacher: **Anil Kumar** Class: PGD**CA (First Sem)**
Subject: **Web Technologies** Paper: **PGDCA105**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to Internet and World Wide Web; Evolution and History of World Wide Web; Basic features; Web Browsers; Web Servers; Hypertext Transfer Protocol; URLs; Searching and Web Casting Techniques; Search Engines and Search Tools.	12/08/24 To 04/09/24	
Unit-2	Web Publishing: Hosting your Site; Internet Service Provider; Planning and designing your Web Site; Steps for developing your Site; Choosing the contents; Home Page; Domain Names; Creating a Website; Website and its Categories.	05/09/24 To 20/09/24	Assignment 1
Unit-3	Web Development: Introduction to HTML; Hypertext and HTML; HTML Document Features; HTML Document structure; HTML command Tags; Creating Links; Heading tags; Text styles; Text Structuring; Text colors and Background colors; Text Formatting; Page Layouts.	21/09/24 To 16/10/24	Test 1
Unit-4	Images; Inserting Graphics; Images as Hyperlinks; Ordered and Unordered lists; Table Creation and Layouts; Frame Creation and Layouts; Working with Forms and Menus; Working with Radio Buttons; Check Boxes; Text Boxes.	17/10/24 To 04/11/24	Assignment 2
	Revision	05/11/24 onward	Test 2

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2024-25

Department: **Computer Science** Type: **Minor**
Name of Teacher: **Anil Kumar** Class: **Bachelor of Phy. Sc. (1st Sem)**
Subject: **Computer Programming Fundamentals** Paper: **C24MIC102T**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to Programming: Overview of programming concepts, Computer Languages: Machine Language, Assembly Language, High Level Language; Source code, Compiler, Interpreter, Object Code; Algorithm, Flow Chart and pseudo code, Basics of problem-solving in programming, Debugging, Error: Types of Error.	29/07/24 To 15/09/24	Assignment 1
Unit-2	Data types: integers, floating-point numbers, strings, and Booleans, Variables and constants, Input/output operations, Operators and expressions, Conditional statements: if, else if, else, Loops: while loops, for loops; Control structures: break, continue; Data structures: Arrays, Stack, Linked list, Queues, Binary Trees	16/09/24 To 04/11/24	Test 1
	Revision	05/11/24 onward	

Unit wise Lesson Plan for ODD Semester 2024-25

Department: Computer science

Name of Teacher: Sat kumar Class: BCA-II

Subject: Introduction to DBMS Paper: 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.	22 July to 18 August	
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.	19 Aug. to 11 Sept.	Assignment-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.	12 Sept to 3 Oct.	Test
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.	4 Oct.to 30 Oct.	Assignment-2

Revision		November	

Department: Computer science

Name of Teacher: Sat Kumar Class: B.A-II

Subject: DBMS Paper: BACS-211

Unit	Description of Chapter / Topics	Duration	Assignment / Test
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	22 July To 14 Aug.	
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.	16 Aug. to 28 Aug.	
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.	29 Aug. To 11 Sept.	Assignment
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). SQL: Why SQL, Data Types; DDL-Create, Alter and Drop table Commands. DML-SELECT/ FROM/ WHERE, INSERT INTO/ VALUES, UPDATE /SET/ WHERE, DELETE Commands. UNION [ALL], INTERSECTION and MINUS Operators.	12 Sept.to 25 Sept.	Test
Revision			

Subject:Operating System Paper: BACS-212

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Structure of Operating Systems: Layers-MS-DOS Layer Structure, Traditional UNIX System Structure; Running Multiple Operating Systems, Running a Virtual Operating System, Operating System Modes, System Boot. Process Management: Introduction to Process, Attributes of a process, Process States, Operations on the Process, Process Schedulers, CPU Scheduling, Scheduling Algorithms, Purpose of a Scheduling algorithms, Introduction to FCFS, Shortest Job First (SJF), Shortest Job First (SJF),Round Robin Scheduling Algorithms.	26 Sept To 9 Oct..	
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 table, Finding Optimal Page Size. Virtual Memory Concepts, Advantages and disadvantage of Virtual Memory. Segmentation, Translation of Logical address into physical address by segment table, Advantages and disadvantage of Segmentation. Paging VS Segmentation	10 Oct. to 23 Oct	Assignment
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.	25 Oct.to 10 Nov.	Test
Unit-4	Shell introduction and Shell Scripting: What is shell and various type of shell, Various editors present in Linux/Unix; Different modes of operation in vi editor; Shell script, Writing and executing the shell script, Shell variable (user defined and system variables); 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)	17 Nov.to Till exam.	
Revision			

Unit wise Lesson Plan for ODD Semester 2024-25

Department: Computer science

Name of Teacher: Sat kumar Class: BCA-III

Subject:DWDM 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.	22 July to 18 August	
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	19 Aug. to 11 Sept.	Assignment-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	12 Sept to 3 Oct.	Test
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.	4 Oct.to 30 Oct.	Assignment-2
Revision		November	

Department: Computer Science

Name of Teacher: Naresh 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.	27/07/2024-10/08/2024	Assignment 1
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.	11/08/2024-21/08/2024	Test 1
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.	22/08/2024-02/09/2024	Assignment 2
Unit-4	Inheritance, Single Inheritance, Making a private member inheritable, Multilevel Inheritance, Multiple Inheritance, Hierarchical Inheritance, Hybrid	02/09/2024-15/09/2024	Test 2

	Inheritance, Virtual Base Class. Abstract Classes, Constructors in derived classes.		
Revision			

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2024-25

Department: Computer Science

Name of Teacher: Naresh 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.	16/09/2024-24/10/2024	Assignment 1
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	25/10/2024-04/11/2024	Test 1

	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		
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.	05/11/2024- 13/11/2024	Assignment 2
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.	14/11/2024 22/11/2024	Test 2
Revision			

Department: Computer Science

Name of Teacher:Naresh 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.	29/07/24 To 28/08/24	Assignment1
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.	29/08/24 To 20/09/24	Test 1
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.	21/09/24 To 10/10/24	Assignment2
Unit-4	Virtual Functions and Polymorphism: Introduction to Virtual Functions, Abstract Base Classes and Concrete Classes, Polymorphism, New Classes and Dynamic Binding, Virtual Destructor, Polymorphism, Dynamic 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.	11/10/24 To 05/11/24	Test 2
Revision		05/11/24 onward	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2024**

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

Class: **BCA-II (3rd Sem.)** Subject: **Digital Electronics**

Course code: **BCA-PC (L)-233**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Information Representation: Number Systems, Binary Arithmetic Operations, Fixed-point and Floating point representation of numbers, BCD Codes, Error 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.	22nd July to 24th August, 2024	Assignment-1
Unit-2	Digital Logic: Basic Gates -AND, OR, NOT, Universal Gates - NAND, NOR, Other Gates - XOR, XNOR etc. NAND, NOR, AND-OR-INVERT and OR-AND-INVERT implementations of digital circuits, Combinational Logic – Characteristics, Design Procedures, analysis procedures, Multilevel NAND and NOR circuits.	27th August to 14th September, 2024	Test-1
Unit-3	Combinational Circuits: Half-Adder, Full-Adder, Half-Subtractor, Full-Subtractor, Encoders, Decoders, Multiplexers, Demultiplexers, Comparators, Code Converters BCD to Seven Segment Decoder.	16th September to 30th September, 2024	Test-2
Unit-4	Sequential Logic: Characteristics, Flip-Flops, Clocked RS, D type, JK, T type and Master Slave flip-flops. State table, State diagram and State equations. Flip-flop excitation tables.	1st October to 26th October, 2024	Mock Test
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November 2024	Presentation

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2024**

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

Class: **BCA-III (5th Sem.)** Subject: **Programming Using Python**

Course code: **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	22nd July to 24th August, 2024	Assignment-1
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.	27th August to 14th September, 2024	Minor 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.	16th September to 30th September, 2024	Minor 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 October to 26th October, 2024	Quiz
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November 2024	Presentation

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2024**
Name of Teacher: **Dr. Anju Jain**
Class: **BCA-III (5th Sem.)** Subject: **Cloud Computing**
Course code: **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 .	22nd July to 24th August, 2024	Assignment-1
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.	27th August to 14th September, 2024	Minor Test-1
Unit-3	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.	16th September to 30th September, 2024	Minor Test-2
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.	1st October to 26th October, 2024	Quiz
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November 2024	Presentation

Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2024**

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

Class: **BCA-II (3rd Sem.)** Subject: **Digital Electronics**

Course code: **BCA-PC (L)-233**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Information Representation: Number Systems, Binary Arithmetic Operations, Fixed-point and Floating point representation of numbers, BCD Codes, Error 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.	22nd July to 24th August, 2024	Assignment-1
Unit-2	Digital Logic: Basic Gates -AND, OR, NOT, Universal Gates - NAND, NOR, Other Gates - XOR, XNOR etc. NAND, NOR, AND-OR-INVERT and OR-AND-INVERT implementations of digital circuits, Combinational Logic – Characteristics, Design Procedures, analysis procedures, Multilevel NAND and NOR circuits.	27th August to 14th September, 2024	Test-1
Unit-3	Combinational Circuits: Half-Adder, Full-Adder, Half-Subtractor, Full-Subtractor, Encoders, Decoders, Multiplexers, Demultiplexers, Comparators, Code Converters BCD to Seven Segment Decoder.	16th September to 30th September, 2024	Test-2
Unit-4	Sequential Logic: Characteristics, Flip-Flops, Clocked RS, D type, JK, T type and Master Slave flip-flops. State table, State diagram and State equations. Flip-flop excitation tables.	1st October to 26th October, 2024	Mock Test
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November 2024	Presentation

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2024**

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

Class: **BCA-III (5th Sem.)** Subject: **Programming Using Python**

Course code: **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	22nd July to 24th August, 2024	Assignment-1
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.	27th August to 14th September, 2024	Minor 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.	16th September to 30th September, 2024	Minor 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 October to 26th October, 2024	Quiz
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November 2024	Presentation

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2024**
Name of Teacher: **Dr. Anju Jain**
Class: **BCA-III (5th Sem.)** Subject: **Cloud Computing**
Course code: **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 .	22nd July to 24th August, 2024	Assignment-1
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.	27th August to 14th September, 2024	Minor Test-1
Unit-3	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.	16th September to 30th September, 2024	Minor Test-2
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.	1st October to 26th October, 2024	Quiz
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November 2024	Presentation

Unit wise Lesson Plan for Odd Semester 2024-25

Department: Computer Science

Name of Teacher: Priyanka Class: BCA-II

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 Web-Casting Techniques; Search Engines and Search Tools.	22nd July to 20th August, 2024	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.	21st August to 15th September, 2024	Minor 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 3rd October, 2024	Assignment-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.	4th October to 26th October, 2024	Minor Test-2 Quiz
Revision	Revision of Syllabus and Query Handling	4th November to 20th November, 2024	Presentation

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2024-25
Department: Computer Science

Name of Teacher: Priyanka Class: BCA-III

Subject: Computer Graphics Paper: 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 flood fill algorithms.	22nd July to 5th September, 2024	Assignment-1
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.	6th September to 30th September, 2024	Test-1
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, polygon-rendering methods.	1st October to 17th October, 2024	Assignment-2
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	18th October to 13th November, 2024	Test-2 Quiz

Revision	Revision of Syllabus and Query Handling	15th November to 22nd November,2024.	Presentation

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2024-25
Department: Computer Science

Name of Teacher: Priyanka Class: BCA-I

Subject: Office Tools Paper: C24SEC106T

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Operating System - Definition, Functions, Types of Operating System, Basics of Popular Operating Systems, The User Interface, Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection, managing files and folders, Control panel – display properties, add/remove software and hardware, Common utilities.	22nd July to 10th September, 2024	Assignment-1
Unit-2	Word Processing - Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, modifying page setup, applying document themes, applying document style sets, Inserting headers and footers.	11th September to 30th September, 2024	Test-1
Unit-3	Spread Sheet: Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus, Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, copying of cells, Mathematical, Statistical and Financial function, Drawing different types of charts, Sort and Filter Data. Creating Presentation, Type of presentation views. Using sound, Animation, Working with Objects, Printing.	1st October to 27th October, 2024	Assignment-2
Revision	Revision of Syllabus and Students Query Handling	4th November to 22nd November,2024.	Presentation

Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2024-25

Department: Computer science

Name of Teacher: Sushil kumar Class: BCA-II

Subject:ADS Paper: 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	22 July to 18 August	
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.	19 Aug. to 11 Sept.	Assignment-1
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	12 Sept to 3 Oct.	Test
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.	4 Oct.to 30 Oct.	Assignment-2
Revision		November	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2024-25

Department: Computer science

Name of Teacher: Sushil Kumar Class: BCA-I

Subject: Computer fundamental and Problem Solving through C Paper: DSC101

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Computer Fundamentals: Characteristics of Computers, Strengths and Limitations of Computers, Classification of Computers, Functional, Application software, Utility software Memory: Primary Memory, Secondary Memory, Types of storage devices, Operating System: Definition, Functions, Features of Operating System Threats: Physical & non-physical threats, Virus, Worm, Trojan, Spyware, Keylogers, Rootkits, Adware, Cookies, Phishing, Hacking, Cracking.	22 July to 18 August	
Unit-2	Overview of C, Character Set, Constants and Variables, Identifiers and Keywords, Data Types, Assignment Statement, Symbolic Constant. Input/output formatted function; Operators & Expression: Arithmetic, Relational, Logical, Bitwise, Unary, Assignment, Conditional Operators and Special Operators Operator Hierarchy; Arithmetic Expressions, Evaluation of Arithmetic Expression, Decision making with if statement, if-else statement, nested if statement, else-if ladder, switch and break statement, Looping Statements: for, while, and do-while loop, jumps in loops.	19 Aug. to 11 Sept.	Assignment-1

Unit-3	Arrays: One Dimensional arrays - Declaration, Initialization and Memory representation; Two Dimensional arrays - Declaration, Initialization and Memory representation. Functions: definition, prototype, function call, passing arguments to a function: call by value; call by reference, recursive functions. Strings: Declaration and Initialization, String I/O, Array of Strings, String Manipulation Functions: String Length, Copy, Compare, Concatenate etc., Search for a Substring.	12 Sept to 3 Oct.	Test
Unit-4	Pointers in C: Declaring and initializing pointers, accessing address and value of variables using pointers; Pointers and Arrays. User defined data types: Structures - Definition, Advantages of Structure, declaring structure variables, accessing structure members, Structure members initialization, Array of Structures; Unions - Union definition; difference between Structure and Union.	4 Oct.to 30 Oct.	Assignment-2
Revision		November	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2024-25

Department: Computer science

Name of Teacher: Sushil Kumar Class: BA-I

Subject: Information Technology Paper: C24MDC105T

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to Computers, Characteristics and Limitations of Computers, Block Diagram of Computer, Classification of Computers, Hardware and Software, Types of software, Computer Languages. Data and information, Types of data & information, Data processing using Computer.,	27 July to 18 August	

Unit-2	Units of a Computer, CPU, ALU, Types of Memory and Memory Hierarchy, Registers, Input Output devices, Mother Board. Processing numerical data using Spreadsheets, Processing and displaying textual data using word processor.	19 Aug. to 11 Sept.	Assignment-1
Unit-3	Societal impact of IT, social use of WWW, privacy security and integrity of Information, Internet, Web Browsers, Internet Connection Types, How Internet Works, ISPs, Search Engines, Emails and Its Working, Internet Security, Uses of Internet, Introduction to Cloud and its Applications.	12 Sept to 30 Oct.	Test
Revision			

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2024-25

Department: 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 and non-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.	4th week of July- 3rd week of August	**Test**-2nd week of August **Assignment 1**- 3rd Week of August
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).	4th Week of August – 1st week of September	

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 titrations (only acid- base).Concept of pH and pK_a, buffer solution, buffer action, Henderson Hazel Blac equation.	2nd Week of September- 1st week of October	**Test**- 1st Week of September **Assignment 2**- 2nd Week of September
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).	2nd Week of October- 1st week of November	**Test**-3rd Week of October
Revision	Problems and Revision of all 4 units	2nd & 3rd week of November	

Renu Rani

Assistant Professor of Chemistry

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2024-25

Department: Chemistry

Name of Teacher: Renu Rani Class: B.Sc.1st Sem Physical Sciences

Subject: Chemistry Paper: Chemistry-1(C24CHE101T)

Unit	Description of Chapter / Topics	Schedule/ Duration	Assignment / Test
Unit-1	**Atomic Structure** Dual behaviour of matter and radiation, de-Broglie's relation, Heisenberg's uncertainty principle, Quantum mechanics. Time independent Schrodinger equation (Derivation Excluded). Significance of Ψ and Ψ_2, Normal and orthogonal wave functions, Concept of atomic orbitals, Significance of quantum numbers, shapes of *s*, *p* and *d* orbitals, Rules for filling electrons in various orbitals, Electronic configurations of the atoms. Stability of half-filled and completely filled orbitals.	4th week of July- 4th week of August	**Assignment 1**- 1st Week of September
Unit-2	**Structure and Bonding** Localized and delocalized chemical bond, Van der Waals interactions, Concept of resonance and its applications, Hyperconjugation, Inductive effect, Electromeric effect and their comparison. **Mechanism of Organic Reactions** Curved arrow notation, homolytic and heterolytic bond fission, Types of reagents: electrophiles and nucleophiles. Types of organic reactions: Substitution, Addition, Condensation, Elimination, Rearrangement, Isomerization. Reactive intermediates: Carbocations, Carbanions, Free radicals and Carbenes (structure & stability).	1st Week- 3rd week of September-	**Test**- 4th week of August

Unit 3	**Stereochemistry** Type of Stereoisomers, Conformations with respect to ethane, butane and cyclohexane. Optical isomerism, Elements of symmetry, Concept of chirality (upto two carbon atoms). Enantiomers, Diastereomerism, Threo and erythro diasteromers and Meso compounds. Configuration: (relative and absolute), sequence rules D and L; R and S (for upto 2 chiral carbon atoms) system of nomenclature; Geometrical isomerism; *cis - trans* nomenclature; and *E*/*Z* Nomenclature (for up to two C=C systems).	4th Week of Sepetmber-3rd week of October	**Assignment 2**-1st Week of October **Test**-3rd Week of September
Unit-4	**Gaseous State** Kinetic theory of gases and derivation of the kinetic gas equation. Maxwell's distribution of velocities and energies (Graphic representation - derivation excluded), Temperature dependence of these distributions, Most probable velocity, Average velocity and Root Mean Square Velocity (Derivations excluded), Relationship among three types of velocities, Collision diameter, Collision number, Collision frequency and Mean free path (with Derivations), Deviation of real gases from ideal behavior, Compressibility factor, Causes of deviation, Derivation of Van der Waal's Equation of State, its application in the calculation of Boyle's temperature	4th Week of October-2nd week of November	**Test**-4th Week of October
Revision	Problems and Revision of all 4 units	3rd & 4th week of November	

Renu Rani

Assistant Professor of Chemistry

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for Odd Semester 2024-25

Department: Chemistry

Name of Teacher: Renu Rani Class: B.Sc.1st Sem Physical Sciences

Subject: Chemistry (SEC) Paper: Basic Laboratory Techniques (C24SEC128T)

Unit	Description of Chapter / Topics	Schedule/ Duration	Assignment / Test
Unit-1	**Chemical Labeling and basic chemical concepts:** Chemical labeling and Chemical concepts related to solution preparation: Equivalent mass, molar mass, specific gravity, concentration (Normality, Molarity, Molality, %w/v, %w/w, %v/v, ppm solutions).	1st week of August-3rd Week of September	**Assignment 1**- 1st Week of September **Test**- 2nd week of September
Unit-2	**Solution Preparation and Purification of compounds**: Standardization of solutions using Volumetric Titrations, Primary and Secondary standards. Indicators and preparation of indicator solutions: (Phenolphthalein, Starch Solution, Eriochrome Black T, N-Phenylanthranilic acid), Buffer Solutions, Types of Buffer Solutions, Henderson Hasselbalch Equation, Preparation and determination of pH of buffer solutions, Complexometric Titrations using EDTA. Purification of compounds through distillation, crystallization and sublimation.	4th Week of September - 3rd week of October-	**Test**- 4th week of October
Revision	Problems and Revision of all 4 units	4th week of October- 4th week of November	

Renu Rani

Assistant Professor of Chemistry

Unit wise Lesson Plan for Even Semester 2024-25

Department: Chemistry

Name of Teacher: Priyanka Punia Class: B.Sc3red NM

Subject: Chemistry Paper: polymer Ist Chemistry

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction and history of polymeric materials: Different schemes of classification of polymers, Polymer nomenclature, Molecular forces and chemical bonding in polymers, Texture of polymers. Nature and structure of polymers-Structure Property relationships.	22-07-2024 to 12-08-2024	
Unit-2	Between functionality, extent of reaction and degree of polymerization.Bi-functional systems, Poly- Functional systems. Properties of Polymers (Physical, thermal, flow & mechanical properties).	13-08-2024 to 05-09-2024	Test
Unit-3	Brief introduction to preparation, structure, properties and application of the following polymers: Polyolefins, polystyrene and styrene copolymers, poly(vinyl chloride) and related polymers, poly(vinyl Acetate) and related polymers, acrylic polymers, fluoro polymers, polyamides and related polymers.	06-09-2024 to 25-09-2024	Assignment
Unit-4	Polycarbonates,Phenol formaldehyde	25-09-	

	resins (Bakelite, Novalac), polyurethanes, silicone polymers, Polydienes, Conducting Polymers, [polyacetylene, polyaniline, poly(p-phenylene sulphide polypyrrole, Polythiophene)].	2024 to 16-10-2024	
Revision	Revision of the Syllabus	16-10-2024to Exam	

Unit wise Lesson Plan for Even Semester 2024-25

Department: Chemistry

Name of Teacher: Priyanka Punia Class: B.Sc3red NM

Subject: Chemistry Paper: Main Group 2nd Chemistry

Unit	Description of Chapter / Topics		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 (EH3), 14, 15, 16 and 17. Oxides of N and P, Oxoacids of P, S and Cl. (8 Hours)		
Unit-2	Halides and oxohalides of P and S (PCl3, PCl5, SOCl2 and SO2Cl2)		Test

	Interhalogen compounds. A brief idea of pseudohalides		
Unit-3 **Unit 4**	Noble gases: Rationalization of inertness of noble gases, clathrates, preparation and properties of XeF2, XeF4 and XeF6 ,bonding in these compounds using VBT and shapes of noble gas compounds using VSEPR Theory 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 (NPCl2)3.		Assignment
Revision	Revision of the Syllabus		

Unit wise Lesson Plan for Even Semester 2024-25

Department: Chemistry

Name of Teacher: Priyanka Punia Class: B.Sc3red NM

Subject: Chemistry Paper: Main Group I Chemistry

Unit	Description of Chapter / Topics		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.		
Unit-2	General Principles of Metallurgy: Chief modes of occurrence of metals based on standard electrode Potentials, 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		Test

	and Kroll Process.		
Unit-3	s- and p-Block Elements 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 and Reducing nature. Oxidation states of s- and p-block elements, inert-pair effect, diagonal relationships and anomalous Behaviour of first member of each group. Allotropy in C, P and S.		Assignment
Unit-4			
Revision	Revision of the Syllabus		

Unit wise Lesson Plan for Even Semester 2024-25

Department: Chemistry

Name of Teacher: Priyanka Punia Class: B.Sc3red NM

Subject: Chemistry Paper: polymer Ist Chemistry

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction and history of polymeric materials: Different schemes of classification of polymers, Polymer nomenclature, Molecular forces and chemical	22-07-2024 to 12-08-2024	

	bonding in polymers, Texture of polymers. Nature and structure of polymers-Structure Property relationships.		
Unit-2	Between functionality, extent of reaction and degree of polymerization.Bi-functional systems, Poly- Functional systems. Properties of Polymers (Physical, thermal, flow & mechanical properties).	13-08-2024 to 05-09-2024	Test
Unit-3	Brief introduction to preparation, structure, properties and application of the following polymers: Polyolefins, polystyrene and styrene copolymers, poly(vinyl chloride) and related polymers, poly(vinyl Acetate) and related polymers, acrylic polymers, fluoro polymers, polyamides and related polymers.	06-09-2024 to 25-09-2024	Assignment
Unit-4	Polycarbonates,Phenol formaldehyde resins (Bakelite, Novalac), polyurethanes, silicone polymers, Polydienes, Conducting Polymers, [polyacetylene, polyaniline, poly(p-phenylene sulphide polypyrrole, Polythiophene)].	25-09-2024 to 16-10-2024	
Revision	Revision of the Syllabus	16-10-2024to Exam	

Department: Commerce

Name of Teacher: Aakanksha Class: M.Com 1st sem

Subject: Business Statistics Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1) Univariate analysis: central tendency 2) Dispersion(theoretical concept):Probability: Introduction 3) Addition Theorem 4) Multiplication Theorem 5) Conditional Probabilty 6) Bayes Theorem 7) Theoretical probability distributions: Binomial , Poission 8) Normal Distribution: their characteristics and applications	upto 30 august	1st assignment in the 2nd week of August

Unit-2	9) Sampling: Probability and non probability sampling methods: Sampling distribution and its characteristics: Hypothesis testing : hypothesis formulations 10) Testing: Statistical Tests: z-test 11) t-test 12) f-test 13) Analysis of variance 14) Chi-square test 15) Wilcoxon Signed-Rank test 16) Kruskal-Wallis test	Upto 2nd week of september	Minor Test in the 1st Week of September
Unit-3	17) Correlation analysis: simple 18) Partial and multiple correlations: Regression analysis: simple linear regression model 19) Ordinary least square method 20) Time series analysis: components of a time series and their measurements and uses	Upto End of september	2nd Assignment in the Last Week of September
Unit-4	21) Index numbers: meaning and types 22) Methods for measuring indices 23) Adequacy of indices: Statistical quality control: causes of variation in quality 24) Control Charts 25) Acceptance sampling.	November	Minor test
Revision		Revision till exam	

Lesson Plan

Unit wise lesson plan for the odd Semester, 2024-25

Teacher: Aakanksha **Class: B.com 2nd year**

Section- A **Subject: Business Law**

Unit	Description of chapter/topics	Duration	Assignment/ Test
Unit 1	Business Law: An overview, Indian Contract Act,1872-An Introduction, Valid Contract and its Elements, Proposal, Acceptance And Revocation, Contractual Capacity of Parties, Free Consent of Parties, Lawful Consideration and Object	3rd week of July to 2nd week of September	1st assignment in the beginning of first week of September
Unit 2	Agreements Expressly Declared as Void, Legal Formalities-Written and Registered, Contingent Contracts, Performance of Contracts, Discharge of Contracts, Implied, Quasi or Constructive Contracts, Consequences of Breach of Contract	3rd week of September to 1st week of October	Minor test in the first week of October
Unit 3	Contracts of Indemnity and Guarantee, Contracts of Bailment and Pledge, Contract of Agency, Negotiable Instruments Act, 1881, Sale of Good act-1930, Contract of Sale, Conditions and Warranties	2nd week of October to last week of October	2nd Assignment in the last week of October
Unit 4	Transfer of Property or Ownership, Performance of Contract – Delivery and Payment, Unpaid Seller, Suits for Breach of Contract, Consumer protection Act-1986,	1st week of November to 3rd week of November	2nd test
Revision	Revision, Presentation and Problem Solving	Last week of November	.....

Lesson Plan

Unit wise lesson plan for the odd Semester, 2024-25

Teacher: Aakanksha **Class: B.com 2nd year**

Section- A **Subject: Business Law**

Unit	Description of chapter/topics	Duration	Assignment/ Test
Unit 1	Business Law: An overview, Indian Contract Act,1872-An Introduction, Valid Contract and its Elements, Proposal, Acceptance And Revocation, Contractual Capacity of Parties, Free Consent of Parties, Lawful Consideration and Object	3rd week of July to 2nd week of September	1st assignment in the beginning of first week of September
Unit 2	Agreements Expressly Declared as Void, Legal Formalities-Written and Registered, Contingent Contracts,	3rd week of September to 1st week of October	Minor test in the first week of October

	Performance of Contracts, Discharge of Contracts, Implied, Quasi or Constructive Contracts, Consequences of Breach of Contract		
Unit 3	Contracts of Indemnity and Guarantee, Contracts of Bailment and Pledge, Contract of Agency, Negotiable Instruments Act, 1881, Sale of Good act-1930, Contract of Sale, Conditions and Warranties	2nd week of October to last week of October	2nd Assignment in the last week of October
Unit 4	Transfer of Property or Ownership, Performance of Contract – Delivery and Payment, Unpaid Seller, Suits for Breach of Contract, Consumer protection Act-1986,	1st week of November to 3rd week of November	2nd test
Revision	Revision, Presentation and Problem Solving	Last week of November	……..

LESSION PLAN --- SALES AND DISTRIBUTION MANAGEMENT, M.COM 3RD SEM.
MR. AJMER SINGH

UNIT-1	SALES MGT-ROLS NATURES, RESPONSIBILITEES,SKILLS, SELLING THEORIES SALES PLANNING AND FORECASTING ORGANISATIONAL STRUCTURES	01-31 AUG.24 TEST-01
UNIT-2	FIELD SALES ORG. SALES FORCE SIZE,TERRITORY MGT,ROUTING,QUOTA, RECRUITMENT,SELECTION ,TRAINNING, COMPANSATION, MOTIVATION, LEADERSHIP	01-30 SEPT. 24 TEST-02
UNIT-3	SALES MEETING AND CONTESTS, CONTROL PROCSS,COST AND PROFIT ANALYSIS, EVALUATING SALES FORCE,ETHICAL ISSUES,	01-31 OCT. 2024 AS-1 AND AS-2, VIVA

UNIT-4	DISTRIBUTION CHANNEELS- ROLES AND FACTORES AFFECTING, CHANNELS BEHAVIOURS, CHANNEL DESIGN DECISION, CHANNEL MGT DECISION,INTENSITY AND PARTERNERING RELATIONSHIP	01-25 NOV. 24 PRESENTATION GD

UNIT	TOPICS/ CHAPTERS	DURATION	REMARKS
1.	INTRODUCTION TO MGT, MANAGERIALS ROLE, SKILLS, SOCIAL RESPONSIBILITIES, CHALLENGES AND APPROACHES, PRINCIPAL AND APPROACHES OF MGT.	25 JULY TO 31 AUGUST 2024	ASSIGNMENT-1
2.	PLANNING- MEANING, PROCESS AND TYPES. MGT. BY OBJECTIVES, DECISION MAKING, ORGANISATION- MEANING, TYPES, AND STRUCTURES, DEPARTMENTATION, AUTHORITY AND RESPONSIBILITY. SPAN CONTROL, CENTRALISATION AND DECENTRALISATION, DELEGATION OF AUTHORITY.	01 TO 30 SEPT. 2024	ASSIGNMENT-2

3	STAFFING-MEANING, IMPORTANCE, PRINCIPPLES, DIRECTING-COMPONANTS, PRINCIPLES, COMMUNICATION- PROCESS AND BARRIERS, PRINCIPLES. LEADERSHIP, MOTIVATION.	01 TO 31 OCT. 2024	TEST-1 AND VIVA, GROUP DISCUSSION
4	COORDINATION-MEANING, IMPORTANCE AND PRINCIPLES, CONTROLLING-NATURE AND OBJECTIVES, TYPES, PROCESS, EFFECTIVE CONTROL AND ITS TECHNIQUES.	01 TO 30 NOV. 2024	TEST-2 AND VIVA, GROUP DISCUSSION

Unit-1	AJMER SINGH [COMMERC] CORPORATE ACCOUNTING, B.COM 3RD SEM VALUATUION OF GOODWILL AND SHARES ISSUE OF SHARES , FORFIETURE, RE-ISSUE,BUY BACK AND BOOK BUILDING, BONUS SHARES. ISSUE OF DEBENTURES,	01AUG-31 AUG. 2024	
UNIT-2 AND 3	FINAL ACCOUNTS OF COMPANIES ACCOUNTS OF HOLDING COMPANIES REDEMPTION OF PREFERENCE SHARE REDEMPTION OF DEBENTURES	01 SEPT. -30 SEPT.2024 01 /10/2024TO 31/10/24	
UNIT -4	INTERNAL RECONSTRUCTION OF COMPANIES AMALGAMATION OF COMPANIES TEST -01 AND TEST- 02 ASSIGNMENTS AND VIVA	01/11/24—30/11/24 0	

Unit wise Lesson Plan for ODD Semester 2024-25

Department: Commerce

Name of Teacher: Dr. Sushila Class: B.com 5th sem

Subject: Business Ethics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1) Nature, scope and importance of Business Ethics 2) Theories of Business Ethics 3) Ethical issues in Business 4) Ethics in Finance 5) Ethics in HRM 6) Ethics in Marketing and consumers Protection	22-07-2024 to 17-08-2024	Verbly test

Unit-2	1) Ethics in production and operations Management 2) Ethics in Global business 3) Ethics in IT 4) Ethics in Decisions Making 5) Whistel Blowing	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	12)Social Responsibility in Business 13)Corporate Goverance	16-09-2024 to 05-10-2024	Minor test
Unit-4	14)Intellectual Property ,Rights and Business Ethics 15)Ethics value system	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2024-25

Department: COMMERCE

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

Subject: Human Resource Management Paper: B.com 506

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	) Nature and scope of Human Resource Management 2) Recent Trends in HRM 3) Human Resource Planning	22-07-2024 to 17-08-2024	Verbly test

	4)Recruitment and Selction		
Unit-2	5) Job Analysis Description and Specifications 6) Placement and Induction 7) Training	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	)Career Planning and development 9)Performance Appraisal	16-09-2024 to 05-10-2024	Minor test
Unit-4	10)compensation Employee Remuneration 11)Employment Health Welfare and safety	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Even Semester 2024-25

Department: COMMERCE

Name of Teacher: Dr. Sushila — Class: M.Com 3rd sem

Subject: Leadership Dynamics — Paper: MCH 334

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	1) Leadership Dynamics: Concept 2) Leadership and Management 3) Leadership and Power 4) Successfully Leadership versus Effective Leadership	22-07-2024 to 17-08-2024	Verbly test
Unit-2	5) Leadership Approaches: Trait Approach 6) Skills Approach	20-08-2024 to	Ist Assignment

	7) Behavioral Approach 8) Situational Approach 9) Contingency Approach 10) Path Goal Approach	15-09-2024	
Unit-3	811)Leadership Styles: Autocratic 12) Democratic 13) Participative 14) Supportive 15) Free - rein : Comparative Analysis of Leadership Styles 16) Building Effective Leadership Styles 17) Leadership Styles of Famous Personalities in general perspective and in managerial perspective	16-09-2024 to 05-10-2024	Minor test
Unit-4	18) Contemporary Issues in Leadership: Charismatic Leadership 19) Women Leadership 20) Multicultural Leadership 21) Team Leadership 22) Ethics in Leadership 23) Servant Leadership 24) Transactional and Transformational leadership.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Lesson Plan for Odd Semester 2024-25

Name of Teacher: **Vijay Kumar Yadav** Class: **M.Com. 3rd Sem.**

Subject: **Human Resource Planning** Paper: **MCH - 331**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Human resource planning: Concept, Objectives, Benefits, Problems, Strategic Human Resource Planning: Job analysis.	4 Weeks	Quiz 1 and Test 1 in 4th Week of August 2024
Unit-2	Human Resource Planning: Process and action plans,	4 Weeks	Assignment 1 in 3rd

	,Human resource Demand Forecasting: Assessment and Techniques, Human Resource supply forecasting: Assessment and Techniques, Action plans for recruitment and Selection, Separation, Retention , Training and Redeployment.		Week of September 2024
Unit-3	Productivity Management and Human Resource Planning: Work study, Method Study, Work measurement, Job Design, Work Scheduling.	4 Weeks	Quiz 2 and Test 2 in 3rd Week of October 2024
Unit-4	Human Resource Planning in changing context: Human Resource Information System, Human Resource Accounting and Audit, Structure of Labour Force and Demographic Changes: Problems and Challenges.	4 Weeks	Assignment 2 and 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 2024-25

Name of Teacher: **Vijay Kumar Yadav** Class: **B.Com. 3rd Sem.**
Subject: **Computerized Accounting System (Practical)** Paper: **BCOM 304**
Group D (2 periods on Sat)

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

Vijay Kumar Yadav
Assistant Professor (Commerce)

GOVERNMENT COLLEGE HANSI
Department of Commerce
Lesson Plan for Odd Semester 2024-25

Name of Teacher: **Vijay Kumar Yadav** Class: **B.Com. 3rd Sem.**
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 .	4 Weeks	Test 1 in 4th Week of August 2024
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.	4 Weeks	Assignment 1 in 3rd Week of September 2024
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.	4 Weeks	Test 2 in 3rd Week of October 2024
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	4 Weeks	Assignment 2 and Viva-voce Exam 2nd Week of November

	regression, correlation vs. regression analysis		
Revision	Revision	1 Week	-

Vijay Kumar Yadav
Assistant Professor (Commerce)

GOVERNMENT COLLEGE HANSI
Department of Commerce
Lesson Plan for Odd Semester 2024-25

Name of Teacher: **Vijay Kumar Yadav** Class: **B.Com. 5th Sem.**
Subject: **Management Accounting** Paper: **BCOM 501**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Management accounting: meaning, scope, importance and techniques. Distinction between financial accounting and management accounting, Distinction between cost accounting and management accounting,	4 Weeks	Test 1 in 4th Week of August 2024
Unit-2	Budgeting and budgetary control: Concept of Budgeting and budgetary control, Objective and advantages of budgetary control, Types of budgets and their preparation, Essentials of a budgetary control system, Performance budgeting and zero-base Budgeting.	4 Weeks	Assignment 1 in 3rd Week of September 2024
Unit-3	Marginal costing: Meaning, Nature, Uses and Limitations, Break-even Analysis, PV Ration, Margin of safety, Angle of Incidence, Decision involving alternative Choices.	4 Weeks	Test 2 in 3rd Week of October 2024
Unit-4	Financial analysis: Meaning, and Importance, Ratio analysis: Meaning, importance, limitations and calculations of ratios. Cash flow statement: Uses and preparation.	4 Weeks	Assignment 2 and Viva-voce Exam 2nd Week of November
Revision	Revision	1 Week	-

Vijay Kumar Yadav
Assistant Professor (Commerce)

Unit wise lesson plan for the odd Semester, 2024-25.

Teacher: Surender Kumar **Class: BCA & BA 1st**

Section: --- **Subject: Fundamentals of Banking**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Introduction to banking: Definition and Evolution of Banking: Historical development of banking system. Types of banks and their functions: Commercial banks, Cooperative banks and central banks. Role and importance of Banking in Economic Development. Research on banking operation. Customer interaction.	From last week of July to last week of August.	
Unit 2	Banking products and services: Deposit accounts (saving, current and fixed deposits): Account opening & Maintenance procedures. Lending Loans: Introduction to loans and advances. Core Banking System (CBS): ATM and Digital Banking. ATM usage and safety precautions and online banking services. Fund transfer (NEFT, RTGS and IMPS. Payment systems. Cheques, demand drafts and digital payment methods. Steps involved in opening a new bank account. KYC process	From 1st week of September to 2nd week of October	Minor test & 1st Assignment in the 2nd week of October.
Unit 3	Regulatory framework of banking and financial inclusion: Central bank and its functions. Reserve Bank of India (RBI). Banking regulation and their objectives. Importance of financial literacy and financial inclusion	From 3rd week of October to 2nd week of November.	2nd assignment in 1st week of November.

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

Section: **Subject: Basic Accounting**

Unit	Description of chapters/topics	Duration	Assignment/ Test
Unit 1	Financial accounting: meaning, need, objectives & scope; book-keeping and accounting; branches of accounting; Limitation of Accounting. GAAP, Accounting Principles: concepts and conventions; and accounting equation; journal; rules of journalizing;	From last week of July to 31st August	1st assignment in the last week of August
Unit 2	Accounting cycle: Classification of accounts, Journal, Rules of debit and credit, Performa of Journal, Compound journal entry, Ledger, Rules regarding posting, Subsidiary Books-Meaning, Objectives & types, Preparation of Cash Book. Trial balance.	From 1st week of September to 30th September.	Minor 1st test in the 2nd week of September.
Unit 3	Depreciation Accounting: Concept, causes of depreciation, Need for providing depreciation, factors determining the amount of depreciation, methods of charging and recording depreciation. Provisions and Reserves: Kinds of provisions and reserves, Difference between provision and reserve.	From 1st week October to 30th October.	2nd assignment in the 3rd week of October.
Unit 4	Financial statements of profit-making entities: Trading Account, Profit and Loss Account, Balance Sheet, Difference between Profit and Loss Account and Balance Sheet, Adjustments in final accounts. Accounting for not-for profit organizations: Receipt and Payment Account, Income and Expenditure Account, Receipt and Payment Account versus Income and Expenditure Account	From 1st November to 3rd week of November	2nd Minor test in the 1st week November.
Revision	Revision, presentation, problem solving	From last week November & Onwards	…….

Unit wise lesson plan for the odd Semester, 2024-25.

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 12th October to last week of October.	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 1st week November to 15th November.	1st Minor test & 1st Assignment in the 2nd 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 3rd week of November to last week of November.	2nd assignment & 2nd test in the last week of November.
Unit 4	Understanding and managing group behaviour, Interpersonal and group dynamics, Transactional analysis, Application of emotional intelligence in organization, Communication process, models of	From 1st week of December & Onwards	

	communication, issues in organizational communication, Organization change, to analyze the major concepts of organizational behaviour in business organizational development, Conflicts management and stress management ,		Presentation
Revision	Revision, presentation, problem solving		…….

Unit wise Lesson Plan for Odd Semester, 2024-2025

Name of Teacher: **Mrs. Bhateri** Class: **B.A. 5th Semester**

Subject: **Economics of Development** Paper: **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Economic Growth and Development, Development and underdevelopment Economic, Factors affecting economic growth	4th week of July to 2nd week of August	Verbal Test
Unit 2	Poverty, Human Development Index, Population Problem and growth pattern of population in developing countries.	2nd week of to August 1st week of September	1st Assignment in 4th week of August
Unit 3	Traditional Measurement of Economics Development- National Income, Per Capita Income, UNDP, Classical theory of Development	2nd week of September to 2nd week of Oct	Class test of 3rd week sept.
Unit 4	Steady State Growth Models - Harrod Domer, Neo Classical Model of Growth, Cambridge Model of Growth.	3rd week of Oct 1st week of Nov	2nd Assignment in the 4th week of Oct
Revision	Revision, problem solving	2nd week of November to 4th week of Nov	

Head of the Department (Economics)

Name of Teacher: **Mrs. Bhateri** Class: **B.A 1st semester**

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, concept of Demand and Supply, Elasticity of Demand and Supply	1st week of August to 4th week of August	Verbal Test
Unit-2	Utility Analysis and Consumers Equilibrium, Indifference Curves Analysis and Consumers Equilibrium, Consumer Surplus	1st week of Sept to 3rd Week of September	1st Assignment in 2nd week of Sept
Unit-3	Production Function and law of production, Isoquants and isocost Lines: producer Equilibrium, Elasticity of Supply	4th week of Sept to 3rd week Oct.	Class test in the 4th week of Sept
Unit-4	Theory of cost, Concepts of Revenue, Break Even Points and its uses	4th week of Oct to 2nd week of November	2nd Assignement in the last week of Oct.
Revision	Revision and problem solving	3rd week of Nov to 4th week of Nov.	

Department Of Economics

Name of Teacher: **Mrs. Bhateri** Class: **B.A 1st semester**

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, concept of Demand and Supply, Elasticity of Demand and Supply	1st week of August to 4th week of August	Verbal Test

Unit-2	Utility Analysis and Consumers Equilibrium, Indifference Curves Analysis and Consumers Equilibrium, Consumer Surplus	1st week of Sept to 3rd Week of September	1st Assignment in 2nd week of Sept
Unit-3	Production Function and law of production, Isoquants and isocost Lines: producer Equilibrium, Elasticity of Supply	4th week of Sept to 3rd week Oct.	Class test in the 4th week of Sept
Unit-4	Theory of cost, Concepts of Revenue, Break Even Points and its uses	4th week of Oct to 2nd week of November	2nd Assignement in the last week of Oct.
Revision	Revision and problem solving	3rd week of Nov to 4th week of Nov.	

Department of Economics

Name of Teacher: **Mrs.Bhateri** Class: **B.A 3rd Semester**

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	4th week of July to 2nd week of August	--
Unit-2	Consumption Function, Investment Function, Investment Multiplier	3rd week of August. To 1st week of Sept	Class test in 4th week of August
Unit-3	Classical and Keynesian theory of Income, Output and Employment, Say's Law of Market, Principal of Effective Demand	2nd week of Sept to 2nd week of October	Assignment-1st in 2nd week of Sept

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	3rd week of Oct to to 3rd week of Nov	Verbal test and 2 nd assignment
Revision	Revision and problem solve	4th week of November	

Lesson Plan Format

Unit wise Lesson Plan for the Odd Semester 2024-25

Name of Teacher: Dr. Mukesh Kumar

Class: B.A. 3rd (5th Semester) Sections: B & C **Subject:** English(Compulsory)

Unit/ Chapter	**Duration**	**Assignment/ Test**
Unit 1st, Introduction to the novel 'Kanthapura' Chapter 1st , 2nd , 3rd & 4th Transcription & Primary Stress	Last week of July to 2nd week of August	
Unit 2nd, Chapter 5th, 6th 7th , 8th & 9th Intonation	3rd week of August to 1st week of September	Minor test in the 4th week of August
Unit 3rd, Chapter 10th , 11th, 12th, 13th & 14th Transitional Words/Phrases	2nd week of September to last week of September	1st Assignment in the 3rd week of September
Unit 4th , Chapter 15th , 16th, 17th, 18th & 19th Sentences & Paragraph Writing	1st week of October to 3rd week of October	2nd Assignment in the 2nd week of October
Revision for all the Chapters of the Novel 'Kanthapura' , Phonetics, Grammar & Composition	Last week October to the Commencement of the Exams	

Govt. College, Hansi

Lesson Plan

Unit wise lesson plan for the Odd Semester 2024-25

Teacher: Dr. Mukesh Kumar **Class : B. A II**

Subject: English (Compulsory) **Section: B &C (3rd Semester)**

Unit No.	**Description of Chapters/ Topic**	**Expected Duration**	**Assignment/Test**
Unit 1	Important poetic Forms and Devices Sonnet XVIII Know Then Thyself Non-Finite Verbs: Infinitive and Gerund	Last week of July to 3rd week of August	1stAssignment in the Month of August
Unit 2	Elegy Written in a Country Churchyard The World is Too Much With Us Grammar : Prepositions	Last week of August to 2nd week of September	Minor Test in the Month of September
Unit 3	Ode on a Grecian Urn My Last Duchess When You are Old Grammar : Clauses and its Types	3rd week of September to 1st week of October	2nd Assignment in the month of October
Unit 4	Where the Mind is without Fear The Bangle Sellers Another Women Grammar : Verb Patterns Prefixes and Suffixes Essay Writing	2nd week of October to 1st week of November	
	Revision All Chapters (poems) Grammar & Compositions	2nd week of November to the Commencement of the Exams	

Govt. College, Hansi

Lesson Plan Format

Unit wise Lesson Plan for the Odd Semester 2024-25

Name of Teacher: Dr. Mukesh Kumar **Subject:** English **Section: A, B &C**

Class: BA 1st (1st Semester) **Course Title: Introduction to Short Story and Basic Grammar**
Course Course Code: C24ENG101T **Course Type: Discipline Specific Course (DSC)**

Unit	Unit/ Description/Topic	Duration	Assignment/ Test
1.	• "God Sees the Truth, But Waits" • "The Model Millionaire" • "The Blind Dog" • "The Boy with a Catapult" • "The Child" • "The Gold Watch"	Last week of July to 3rd week of August	1st Assignment in 2nd week of August
2.	• "Games at Twilight" • "The Beloved Charioteer" • "The Dog of Tithwal" • "Wasp's Nest" • "Sweat" • "Once upon a Time"	4th week of August to 2nd week of September	Minor test in 1st week of September
3.	• "Tenses and Usage" • "Parts of Speech: Noun, Pronouns, Adjective, Verbs, Adverb, Conjunction, Interjection, Preposition"	3rd week of September to 1st week of October	2nd Assignment in 1st week of October
4.	• "Voice and Narration" • "Literary terms: short-story, fiction and non-fiction, plot, theme, foreshadowing, flashback, irony, wit, humor, narrator, point of view".	2nd week of October to 3rd week of October	
	Revision	last week of October to till the commencement of the Exams	

Govt. College, Hansi

Lesson Plan Format

Unit wise Lesson Plan for the Odd Semester 2024-25

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

Class: BA 1st (1st Semester) **Course Title:** Introduction to Short Story and Basic Grammar
Course Code: C24MIC101T **Course Type:** Minor Course (MIC)

Unit No.	**Description of Chapters/ Topic**	**Expected Duration**	**Assignment/Test**
Unit 1	God Sees the Truth, But Waits The Model Millionaire The Blind Dog The Boy with a Catapult The Child The Gold Watch	Last week of July to last week of August	1st Assignment in the month of August
Unit 2	Tenses and Usage, Narration Parts of Speech: Noun, Pronouns, Adjective, Verbs, Adverb, Conjunction, Interjection, Preposition	1st week of September to 2nd week of October	Minor test in the month of September
	Revision	3rd week of October to the Commencement of the Exams	**2nd Assignment in the month of October**

ESSON PLAN

2024-25

CLASS: BA (First Semester)

NAME OF TEACHER: DR. HONEY SETHI

SUBJECT: SEC

(ENGLISH

UNITS	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
	22 JUL.-22 AUG.	IN DETAIL: INTRODUCTION TO SOFT SKILLS AND ITS TYPES. CRITICAL THINKING SKILLS COMMUNICATION SKILLS,VERBAL AND NON-VERBAL COMMUNICATION VOICE MODULATION SITUATIONAL CONVERSATIONS PUBLIC SPEECH		

	23 AUG.-23SEP	IN DETAIL: GROUP DISCUSSION MOCK INTERVIEW PRESENTATION SKILLS PITCH AND TEMPO FOR EFFECTIVE PRESENTATION	Assignment 1	
	24SEP. – 10 OCT.	IN DETAIL: TIME MANAGEMENT SKILLS GOAL SETTING EMOTIONAL INTELLIGENCE POSITIVE ATTITUDE AND CONFIDENCE BUILDING TECHNIQUES	Test	
	11 OCT.-31OCT. 01 NOV.-15NOV.	IN DETAIL: ANGER AND STRESS MANAGEMENT PROBLEM SOLVING SKILLS TEAM WORK AND COLLABORATION SKILLS 5C'S OF TEAM WORK SKILLS LEADERSHIP SKILLS	Assignment 2	

	16NOV.-TILL EXAMS	**Revision**		

UNITS	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
	22 JUL- 22AUG.	Chapter-1 Important Poetic Forms andDevices Chapter-2 Sonnet XVIII Chapter-3 Know Then Thyself With Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers etc.		
	23AUG.-15SEP	Chapter-4 Elegy Written in a Country Churchyard Chapter-5 The World is Too Much with Us Chapter -6 Ode on a Grecian Urn With Poetic Forms, Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers etc.	Assignment 1	

	16 SEP. – 10 OCT.	Chapter-7 My Last Duchess Chapter-8 When You are Old Chapter-9 Where the Mind is withoutFear With Poetic Forms, Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers etc.	Test	
	11OCT.-10 NOV. 11NOV-Till Exam.	Chapter-10 The Bangle Sellers Chapter-11 Another Woman With Poetic Forms, Synonyms, Antonyms, Phonetic Transcription, Short and Long Question-Answers etc. **Revision**	Assignment 2	

NOVEL	**TIME PERIOD**	**TOPICS**	**TESTS AND ASSIGNMENTS**	**REMARKS**
KANTHAPURA	22 JUL- 22 AUG.	In detail : Chapter-1 Chapter-2 Chapter-3 Chapter-4 With Synonyms, Antonyms, Phonetic		

		Transcription , Short and Long Question-Answers, Grammar etc.		
	23AUG.- 15SEP.	In detail : Chapter-5 Chapter-6 Chapter -7 Chapter-8 With Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers, Grammar etc.	Assignment 1	
	15SEP.- 30SEP.	In detail : Chapter-9 Chapter-10 Chapter-11 Chapter-12 With Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers, Grammar etc.	Test	
.	01OCT.- 20OCT.	In detail : Chapter-13 Chapter-14 Chapter-15 Chapter-16 With Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers, Grammar etc.	Assignment2	

	21OCT.- 20NOV. 20NOV.- Till Exam.	In detail : Chapter- 17 Chapter- 18 Chapter- 19 With Synonyms, Antonyms, Phonetic Transcription , Short and Long Question-Answers, Grammar etc. **Revision**		

Department: Physical Education

Name of Teacher: Dr. Rajni Saini Class: B.A 1st

Subject: History and Foundation of Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Meaning and definition of Physical Education • Relationship of Physical Education with Health and General Education • Aim and Objectives Physical Education • Scope of Physical Education. • Need of Physical Education in modern society. • Misconceptions regarding Physical Education. • Physical Education as Arts or Science	22-07-2024 to 17-08-2024	Verbly test
Unit-2	Physical Education during Indus Valley Civilization (3250 BC – 2500 BC) • Physical Education during Vedic period (2500 BC – 600 BC) • Physical Education during Early Hindu Period (600 BC – 320 A.D) • Physical Education during Later Hindu Period (320 A.D – 1000 A.D) • Physical Education during Medieval Period (1000 A.D – 1757 A.D) • Physical Education during British Period (Till 1947) • Physical Education during After Independence	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Meaning of Growth and Development • Meaning of Chronological Age, Anatomical age, Physiological age and Mental age • Principles of Growth and developmentt • Difference between Growth and development • Factor affecting Growth and development • Growth and Development at various Levels of Childhood: Pre - Adolescence – Adolescence – Adulthood.	16-09-2024 to 05-10-2024	Minor test
Unit-4	• Difference between Growth and development • Factor affecting Growth and development • Growth and Development at various Levels of Childhood: Pre - Adolescence – Adolescence – Adulthood.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Department: Physical Education

Name of Teacher: Dr. Rajni Saini Class: B.A IInd

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.	22-07-2024 to 17-08-2024	Verbly test
Unit-2	Common dieses- communicable and non communicable.	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Concept of balanced diet.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Anotomy and physiology of circulatory system.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for ODD Semester 2024-25

Department: Physical Education

Name of Teacher: Dr. Rajni Saini Class: B.A III

Subject Physical education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Growth and development	22-07-2024 to 17-08-2024	Verbly test
Unit-2	Concept of sports organization and administration.	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Concepts of posture.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Anatomy and physiology of muscular system	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Department: Psychology

Name of Teacher: Dr. Alka Class: B.A 1st

Subject: Psychology Paper: Foundation of Psychology

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1			Verbly test

	Introduction: Nature and Scope of Psychology; Psychology as a Science. Methods to Study Behaviour : Interview, Observation, and Experimental. Problems related to sensation and perception.	22-07-2024 to 17-08-2024	
Unit-2	Sensation: Nature, Characteristics and Types Structure and Functions of Visual and Auditory sensation. Perception: Nature, Perceptual organization laws, Depth Perception cues, Illusions	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Emotion: Nature, Physiological correlates and Theories: James-Lange, Cannon- Bard and Schachter-Singer. Motivation: Nature, Biological and Social Motives, Theories- Maslow and McClleland.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Personality: Nature, Factors Affecting and Theories: Allport, Cattell and Eysenck. Intelligence: Nature, Factors Affecting and Theories: Spearman, Thurstone, and Cattell	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

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		22-07-2024	Verbly test

	Introduction: nature, subject matter, sociometric method. Socialization: nature, process and agents of socialization.	to 17-08-2024	
Unit-2	Group : types and functions, social norms: meaning, characteristics and formation. Leadership : type, function, theories-trait, situational and interactional.	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Attitudes : characteristics, developmental and attitude change. Prejudice : nature, development and stereotypes.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Prosocial behavior: nature, determinants, cognitive model. Aggression : nature, determinants and prevention.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

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.	22-07-2024 to	Verbly test

		17-08-2024	
Unit-2	Classification of psychopathology : need for classification, DSM system. Diagnostic Assessment : case history, interview projective techniques.	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Anxiety based disorder: GAD, OCD, and phobic disorders- symptoms and causes. Substance / drug abuse: causes, consequences and rehabilitation.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Mood disorders : unipolar and biopolar- symptoms and causes. Schizophrenia : nature, types and casues.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Department: Psychology

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

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction: Nature and Scope of Psychology; Psychology as a Science. Methods to Study Behaviour : Interview, Observation, and Experimental. Problems related to sensation and perception.	22-07-2024 to 17-08-2024	Verbly test
Unit-2	Sensation: Nature, Characteristics and Types Structure and Functions of Visual and Auditory sensation. Perception: Nature, Perceptual organization laws, Depth Perception cues, Illusions	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Emotion: Nature, Physiological correlates and Theories: James-Lange, Cannon- Bard and Schachter-Singer. Motivation: Nature, Biological and Social Motives, Theories- Maslow and McClleland.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Personality: Nature, Factors Affecting and Theories: Allport, Cattell and Eysenck. Intelligence: Nature, Factors Affecting and Theories: Spearman, Thurstone,	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation

	and Cattell		2nd Assignment
Revision		11-11-2024 to Exam	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2024-25 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.	22-07-2024 to 17-08-2024	Verbly test
Unit-2	Group : types and functions, social norms: meaning, characteristics and formation. Leadership : type, function, theories-trait, situational and interactional.	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Attitudes : characteristics, developmental and attitude change. Prejudice : nature, development and stereotypes.	16-09-2024 to 05-10-2024	Minor test

Unit-4	Prosocial behavior: nature, determinants, cognitive model. Aggression : nature, determinants and prevention.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Lesson Plan
Government College, Hansi
Unit wise Lesson Plan for ODD Semester 2024-25
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.	22-07-2024 to 17-08-2024	Verbly test
Unit-2	Classification of psychopathology : need for classification, DSM system. Diagnostic Assessment : case history, interview projective techniques.	20-08-2024 to 15-09-2024	Ist Assignment
Unit-3	Anxiety based disorder: GAD, OCD, and phobic disorders- symptoms and causes. Substance / drug abuse: causes, consequences and rehabilitation.	16-09-2024 to 05-10-2024	Minor test
Unit-4	Mood disorders : unipolar and biopolar- symptoms and causes. Schizophrenia : nature, types and casues.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment

Revision		11-11-2024 to Exam	

Government College, Hansi……Unit wise Lesson Plan for the Odd Semester, 2024-25
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 July to 4th Week of August	1st Assignment
Unit 2	Factors Affecting Location of Economic Activity with special reference to Agriculture (Von Thunen Theory), Industry (Weber's	1st Week of September to 2nd Week of	

	Theory).	September	
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.	3rd Week of September to 1st Week of October	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.	2nd Week of October to 2nd Week of November	2nd Assignment
Revision	All Four Units	Up to the commencement of examinations	

Government College, Hansi……Unit wise Lesson Plan for the Odd Semester, 2024-25
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.	4th Week of July to 2nd Week of August	…..
Unit 2	Distribution Maps: Qualitative Maps	3rd Week of August to 2nd Week of September	….
Unit 3	Distribution Maps: Quantitative Maps	3rd Week of September to 3rd Week of October	….
Unit 4	Prismatic Compass Survey	4th Week of October to 2nd Week of November	…..

Unit wise Lesson Plan for the Odd Semester, 2024-25
Name of the Teacher: Dharmvir
Class: **B.A. 1st Semester (Sec A & C)**

Subject: **Geography of India (DSC)** Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Physiology of India: Location, relief and drainage systems. Climate, soils, natural vegetation and natural disasters in India.	First Week of August to last Week of August	1st Assignment in the 1st week of September
Unit 3	Energy and Mineral Resources - Coal,	First Week of	

	Petroleum, Solar, Hydroelectricity and Nuclear Energy. Mineral Resources:- Iron Ore, Manganese, Aluminium and Mica	September to Last Week of September	--------
Unit 4	Industrial regions of India and Industries - Iron and steel, cotton textile, sugar. Transport and communication, Modes of transport:- Road, Railway, Water.	1st Week of October to 3rd Week of October	Minor Test in the 1 Week of October
Unit 2	Population: Distribution, Density, Growth and Composition. Green Revolution in India. Production and distribution of crops: Rice, wheat, cotton and sugarcane.	4th Week of October to 4th week of November	2nd Assignment in the 2nd Week of November
Revision	Revision, presentation, problem solving	Onwards	…….

Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2024-25

Name of the Teacher: Dharmvir

Class: **B.A. 5th Semester (Group 4 & 5)**

Subject: **Economic Geography** Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Principal of Map design and Layout	First Week of August to last Week of August	…..
Unit 2	Qualitative Distribution Maps • Choroschematic Maps	First Week of September to Last	….

	• Chorochromatic Maps	Week of September	
Unit 3	Quantitative Distribution Maps • Isopleth Maps • Choropleth Maps • Dot Maps • Diagrammatic Maps	1st Week of October to 3rd Week of October	….
Unit 4	Prismatic Commpass Survey	4th Week of October to 4th week of November	….
Revision	Revision, Problem Solving & Quizzes	Onwards	…….

Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2024-25

Name of the Teacher: Dharmvir

(VAC) Value Added Course

Class: **BA/BCA/B.com/B.Sc/B.Sc (Hons)** Subject: **EVS (Sec C & D)**

Paper: **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	First Week of August to last Week of August	1st assignment in the beginning of first week of September

	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 spot of 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		
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	First Week of September to Last Week of September	Minor test in the first week of October
Unit 3	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution,	1st Week of October to 3rd	1st Test in the first week of

	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	Week of October	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, 2024-25

Name of the Teacher: Dharmvir

Class: **B.A. 1st Semester**

Subject: **Surveying Technique (SEC)** Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Definition and Importance of Survey: Method of Surveying: Primary division of Survey; Classification of Survey. Types of survey based on Instruments and	2nd Week of August to 4th Week of	1st Assignment in the 1st week of September

	Method. Chain and Tape Survey; instruments, method and importance of Chain and Tape Survey.	August	
Unit 2	Plain Table Survey; instruments, types of plane table survey and importance of Plain Table Survey. Prismatic Compass Survey; instruments, method and importance of Prismatic Compass Survey. Contemporary relevance of Surveying technique in Geography	First Week of September to Last Week of September	Minor Test in the 1st week of October
Revision	Revision, presentation, problem solving	Onwards	…….

Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2024-25

Name of the Teacher: Dharmvir

Class: **B.A. 1st Semester**

Subject: **Surveying Technique (SEC)** Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Chain and Tape Survey : Traverse Method	2nd Week of August to 4th Week of August	2 Exercise
Unit 2	Plane Table Survey: Radiation Method, Intersection Method and Traverse Method. Prismatic Compass Survey Radiation Method, Intersection Method and Traverse Method.	First Week of September to Last Week of September	3 Exercise 3 Exercise
Revision	Revision, presentation, problem solving	Onwards	…….

Unit wise Lesson Plan for the Odd Semester, 2024-25 Name of the Teacher: Jatin

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

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Weather and Climate; Origin, composition and structure of atmosphere. 2. Insolation, Global heat budget, Horizontal and vertical distribution of temperature,	First Week of August to last Week of August	1st Assignment in the 1st week of September

	inversion of temperature.		
Unit 3	Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon, Jet Streams EL NINO- La Nina Phenomenon and Local winds. Humidity- measurement and variables, evaporation, condensation, precipitation types and distribution, hydrological cycle.	First Week of September to Last Week of September	--------
Unit 4	Air masses- concept and classification; Fronts-type and characteristics, Weather disturbances- tropical and extra-tropical cyclones. Climate classification by Koppen; climatic change and global warming.	1st Week of October to 3rd Week of October	Minor Test in the 1 Week of October
Unit 2	Configuration of oceanic floors and surface relief of Pacific, Atlantic and Indian Oceans; temperature and salinity of oceans. 2. Tides, waves and oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.	4th Week of October to 4th week of November	2nd Assignment in the 2nd Week of November
Revision	Revision, presentation, problem solving	Onwards	…….

Government College, Hansi

Unit wise Lesson Plan for the Odd Semester, 2024 - 25 Name of the Teacher: Jatin

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

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Measurement of temperature, rainfall, pressure and humidity.	First Week of August to last Week of August	…..
Unit 2	Representation of temperature and rainfall. (i) Line and Bar Graph - 1 Exercise. (ii) Distribution of temperature (180 therms) 1 Exercise. - (iii) Distribution of rainfall (180 hytes) - 1 Exercise. (iv) Hythergraph - 1 Exercise. (v) Rainfall deviation diagram - 1 Exercise.	First Week of September to Last Week of September	….
Unit 3	Climograph (wet and dry places) - 2 Exercise. Distribution of pressure (180 bars) - 2 Exercise.	1st Week of October to 3rd Week of October	….
Unit 4	Weather map Interpretation (January & July) - 2 Exercise	4th Week of October to 4th week of November	….
Revision	Revision, presentation, problem solving	Onwards	…….

Govt Collage Hansi ...Unit wise Lesson Plan for the Odd Semester 2024-25

Name of Teacher: Baljeet Rani, Dr. Madhulika

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

Unit	Description of Topic / Chapter	Duration.	Assignment / Test
Unit 1st.	अ □□ □ न व □□ □□ □ ग	□□ □□ई-अग□□त।	□□ □ र थ म □□ □ र द
Unit 2nd.	□□ □□ □ ध - □□ □ ख □□ □	अ □□ □□ □ ब र □□ □ ग	□□ □□ □□ □ य □□ □ र द
Unit 3	स र □□ □□ □ प	□□□□□□□ □□□□□□ □□□□□□ □□□□□ □□□□□ □□□□□□	
Unit 4	□□ □□ □□ □ क श	□□ □ व ब र □□	
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vt Collage Hansi ...Unit wise Lesson Plan for the Odd Semester 2024-25

Name of Teacher: Dr Madhulika

Class: B .A -1st(MDC) Subject : Hindi

Unit	Description of Topic / Chapter	Duration.	Assignment / Test
Unit 1st.	ज म क ध र	ई-अग त।	र थ म र ट
Unit 2nd.	रहसन और टक स र त	अ ब र र	य र ट
Unit 3	ध ल ह		
		न	

Govt Collage Hansi ...Unit wise Lesson Plan for the Odd Semester 2024-25

Name of Teacher : Dr. Madhulika, Dr. Sanjay, Baljeet Rani

Class: B.A -1st(SEC) Subject : Hindi paper : Compulsory

Unit	Description of Topic / Chapter	Duration.	Assignment / Test
Unit 1st.	कंप्यूटर में हिंदी का आरंभ और विकास कंप्यूटर और हिंदी चुनौतियां एवं संभावनाएं कंप्यूटर में हिंदी के विभिन्न प्रयोग हिंदी के महत्वपूर्ण सॉफ्टवेयर्स हिंदी फॉन्ट का अनुप्रयोग यूनिकोड से पूर्व और उसके बाद कुंजी पटेल का स्वरूप एवं विकास हिंदी में एक्सेल शीट पावर पॉइंट का निर्माण एमएस वर्ड में कार्य	चौथासप्ताह जुलाई से तृतीय सप्ताह सितंबर तक	प्रथम प्रदत कार्य चौथा सप्ताह अगस्त, प्रथम कक्षा परीक्षा आखिरी सप्ताह सितंबर
Unit 2nd.	हिंदी वेब डिजाइनिंग हिंदी वेबसाइट्स हिंदी ई पोर्टल हिंदी ई पत्रिका हिंदी ब्लॉग लेखन प्रकाशन हिंदी विकिपीडिया लेखन और उसकी विकास प्रक्रिया का अध्ययन	आखिरी सप्ताह सितंबर से आखिरी सप्ताह अक्तुबर तक	मौखिक परीक्षा प्रथम सप्ताह अकतुबर, द्वितीय प्रदत कार्य आखिरी सप्ताह अकतुबर

	हिंदी भाषा शिक्षण और ई-लर्निंग ई पाठशाला हिंदी भाषा और ई गवर्नेंस		
Unit 3rd	कंप्यूटर और हिंदी टाइपिंग	प्रथम सप्ताह नवंबर से तृतीय सप्ताह नवंबर तक	द्वितीय कक्षा परीक्षा प्रथम सप्ताह नवंमबर।
Revision	पुनरावृति	नवंबर आखिरी सप्ताह।	

Unit wise Lesson Plan for Odd Semester, 2024-25

Name of Teacher: Mr. Amit Kumar

Class: B.Sc 2nd 3rd semester

Semester: 3 **Subject:** Mathematics **Paper**: Advanced Calculus

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test/ Remarks**
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.	22-07-2024 to 17-08-2024	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.	20-08-2024 to 15-09-2024	Ist Assignment
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.	16-09-2024 to 05-10-2024	Minor test

Unit 4	Jacobians , Beta and Gamma Function , Double and triple integral	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2024-25

Name of Teacher: Mr. Amit Kumar

Class: B.Sc 2nd 3rd semester

Semester: 3 Subject: Mathematics Paper: Numerical Analysis

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test/ Remarks**
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: Newton's divided difference, Lagrange's Interpolation formulae, Hermite Formula.	22-07-2024 to 17-08-2024	Verbly test
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.	20-08-2024 to 15-09-2024	Ist Assignment
Unit 3	Numerical Differentiation: Derivative of a function using interpolation formula. Eigen Value Problems: Power method, Jacobi's method, Given's method, House-Holder's method, QR method, Lanczos method.	16-09-2024 to 05-10-2024	Minor test

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,Milne-Simpson's method.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2024-25

Name of Teacher Mr. Amit Kumar Class : **B.Sc 1st Semester**

Subject: **Algebra and number theory** Paper : C24MAT101T

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test/ Remarks**
Unit 1	Symmetric, Skew- symmetric, Hermitian and Skew- Hermitian matrices, Elementary operations on matrices, rank of a matrix. Row rank and column rank of a matrix. Eigen values, eigenvectors and the characteristic equation of a matrix. Minimal polynomial of a matrix. Cayley Hamilton theorem and its use in finding the inverse of a matrix.	22-07-2024 to 17-08-2024	Verbly test
Unit 2	Applications of matrices to a system of linear (both homogeneous and non – homogeneous) equations. Theorems on consistency of a system of linear equations. Unitary and Orthogonal Matrices. Relations between the roots and coefficients of general polynomial equation in one variable.	20-08-2024 to 15-09-2024	Ist Assignment
Unit 3	Solutions of polynomial equations having conditions on roots. Common roots and multiple roots. Nature of the roots of an	16-09-2024 to 05-10-2024	Minor test

	equations, Solutions of cubic equations (Cardon's method). Biquadratic equations and their solutions (Ferrari's Method).		
Unit 4	Divisibility, G.C.D. (greatest common divisors), L.C.M. (least common multiple), problems based on prime numbers, Fundamental Theorem of Arithmetic. Linear Congruence, Euler's Theorem, Fermat's theorem. Wilson's theorem and its converse. Chinese Remainder Theorem	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2024-25

Name of Teacher Mr. Amit Kumar **Class** : **B.Sc 1st Semester**

Subject: Basic Algebra and Number Theory Lab **Paper** : C24MAT101P

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test/ Remarks**
Unit 1	Introduction to PYTHON Language. The history of PYTHON Language. To learn basic commands and applications of PYTHON Language. Learn to use basic operators and function in PYTHON Language.	22-07-2024 to 17-08-2024	
Unit 2	To explore the different menus in PYTHON Language. Learn Keywords/Reserved words in PYTHON Language. To learn the use of predefined functions in PYTHON Language	20-08-2024 to 15-09-2024	
Unit 3	1. To learn basic operations on matrices. 2. To find the value of a determinant of matrix of order up to four. 3. To compute inverse of square matrix of order up to four. 4. To find Eigen values of square matrix of order up to four. 5. To find Eigen vectors of square matrix of order up to four. 6. To solve system of linear equations.	16-09-2024 to 05-10-2024	

	7. To find roots of quadratic, cubic and biquadratic equations. 8. To find multiple roots of algebraic equations.		
Unit 4	9. To discuss nature of roots of an equation. 10. To learn the concept of divisibility in integers. 11. To find the number of divisors of an integer. 12. To find GCD and LCM of two integers. 13. To find the remainder of an integer when divided by the integer. 14. To find the integers x, y such that d = ax + by where d is the g.c.d. of a and b. 15. To solve problem based on the concept of primes. 16. To solve problems based of the concept of linear congruence.	06-10-2024 to up to Exam	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2024-25

Name of Teacher Mr. Amit Kumar class : **B.Sc 5th(Hons) Semester**

Subject: **Sequences and Series** Paper : BML 505

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test/ Remarks**
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	22-07-2024 to 17-08-2024	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	20-08-2024 to 15-09-2024	Ist Assignment

	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		
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 Condensation Test Problems and solutions	16-09-2024 to 05-10-2024	Minor test
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	6-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2024-25

Name of Teacher Mr. Amit Kumar class: **BCA 1st Semester**

Subject: Mathematical Foundations for Computer Science-I

Paper: MIC-104

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test/ Remarks**
Unit 1	Sets and Relations: Definition of sets, subsets, complement of a set, universal set, intersection and union of sets, De-Morgan's laws, Cartesian products, Equivalent sets, Countable and uncountable sets, Minset, Partitions of sets, Simple Applications	22-07-2024 to 17-08-2024	Verbly test
Unit 2	Definition of Relation, Properties of Relations, Equivalence Relation, Partial Order Relation, POSET, Lattice. Function: Domain and Range, Types of Functions, Composite and Inverse Functions	20-08-2024 to 15-09-2024	Ist Assignment
Unit 3	Algebra of Logic: Proposition logic, basic logic, Logical Connectives, truth tables,	16-09-2024 to	Minor test

	tautologies, contradiction, Logical implication, Logical equivalence, Normal forms, Theory of Inference and deduction. Predicate Calculus: Predicates and quantifiers.	05-10-2024	
Unit 4	Algebra of Matrices: Definition, Types of Matrices, Addition, Subtraction, Scalar Multiplication and Multiplication of Matrices, Adjoint and Inverse of a matrix. Determinants: Definition, Minors, Cofactors, Properties of Determinants, Applications of determinants in finding area of triangle, Solving a system of linear equations.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-22024 Diwali Vacation 2nd Assignment
Revision		11-11-2024 to Exam	

Unit wise Lesson Plan for Odd Semester 2024-25

Department: Mathematics

Name of Teacher: Dr. Ankur Bala Class: B.A.II(3rd semester)

Subject: Mathematics Paper: Advanced Calculus

Unit	Description of Chapter / Topics	Duration	Remarks
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	22-07-2024 to 17-08-2024	
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.	20-08-2024 to 15-09-2024	

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.	16-09-2024 to 05-10-2024	
Unit-4	Jacobians, Beta and Gama functions, Double and Triple integrals, Dirichlets integrals, change of order of integration in double integrals.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-2024 Diwali Vacation
Revision	Revision of the Syllabus	11-11-2024 to Exam	

Name of Teacher: Dr. Ankur Bala **Class : B.Sc &B.A. 5th Semester**

Subject: Sequences and Series

Unit	Description of Chapter/Topic	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.	3rd week of Aug to 4th week of Aug	Verbly test
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,	Istweek of september to 3rd week of September	

	Dirichlet’s 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.	4th week of September to 4th week of October	Ist Assignment inlast week of september
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.	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: Dr.Ankur Bala **Class: B.Sc.III (H)5th sem**

Subject: Mathematics **Paper: Real Analysis**

Unit	Description of Chapter / Topics	Duration	Remarks
Unit-1	Riemann integral, Integrability of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.	22-07-2024 to 17-08-2024	
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 integrability of an integral of a function of a parameter.	20-08-2024 to 15-09-2024	
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	16-09-2024 to 05-10-2024	

	metrics, Cauchy sequences, completeness, Cantor's intersection theorem, Baire's category theorem, contraction Principle		
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.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-2024 Diwali Vacation
Revision	Revision of the Syllabus	11-11-2024 to Exam	

Name of Teacher: Dr.Ankur Bala **Class: B.Sc.III (H)5th sem**
Subject: Mathematics **Paper: Programming in C & Numerical Methods**

Unit	Description of Chapter / Topics	Duration	Remarks
Unit-1	Programmer's model of a computer, Algorithms, Flow charts, Data types, Operators and expressions, Input / Output functions.	22-07-2024 to 17-08-2024	
Unit-2	Decisions control structure: Decision statements, Logical and conditional statements, Implementation of Loops, Switch Statement & Case control structures. Functions, Preprocessors and Arrays.	20-08-2024 to 15-09-2024	
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	16-09-2024 to 05-10-2024	

	equations: Bisection method, Regula-Falsi method, Secant method, Newton-Raphson's method. Newton's iterative method for finding pth root of a number.		
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.	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-2024 Diwali Vacation
Revision	Revision of the Syllabus	11-11-2024 to Exam	

Unit wise Lesson Plan for Odd Semester 2024-25

Department:Mathematics

Name of Teacher:Manish Gautam Class:B.Sc. 3rd hons.

Subject:Mathematics Paper:Operation Research

Unit	Description of Chapter / Topics	Months	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.**	22-07-2024 to 17-08-2024	

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).**	20-08-2024 to 15-09-2024	
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.**	16-09-2024 to 05-10-2024	
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**	06-10-2024 to 10-11-2024	27-10-2024 to 03-11-2024 Diwali Vacation

Revision	Revision of the Syllabus	11-11-2024 to Exam	

eacher Santosh Devi

Class B.A.I(ist sem)

Session 2023-24

Subject Basic Algebra and Number Theory

Week 1	Unit I: Introduction to Matrices - Topics: Symmetric, Skew-symmetric, Hermitian, and Skew-Hermitian Matrices. Elementary Operations on Matrices. Rank of a Matrix, Row Rank, and Column Rank.
Week 2	- Unit I: Eigenvalues and Eigenvectors - Topics: Eigenvalues and Eigenvectors of a Matrix. Characteristic Equation of a Matrix. Minimal Polynomial of a Matrix.
Week 3	- Unit I: Matrix Theorems - Topics: Cayley-Hamilton Theorem. Applications of the Cayley-Hamilton Theorem. Inverse of a Matrix Using the Cayley-Hamilton Theorem.

Week 4	- Unit II: Applications of Matrices - Topics: Introduction to Systems of Linear Equations. Homogeneous Systems of Linear Equations. Non-Homogeneous Systems of Linear Equations.
Week 5	- Unit II: Consistency and Matrix Types - Topics: Theorems on the Consistency of a System of Linear Equations. Unitary Matrices. Orthogonal Matrices.
Week 6	- Unit II: Polynomial Relations - Topics: Relations Between Roots and Coefficients of General Polynomial Equations. Solving Polynomial Equations Using Matrices. Applications of Matrix Theory in Polynomial Equations.
Week 7	- Unit III: Polynomial Equations - Topics: Solutions of Polynomial Equations with Conditions on Roots. Common Roots and Multiple Roots. Nature of Roots of Polynomial Equations.
Week 8	- Unit III: Special Methods - Topics: Solutions of Cubic Equations (Cardon’s Method). Biquadratic Equations. Ferrari’s Method for Polynomial Equations.
Week 9	- Unit IV: Number Theory Basics - Topics: Divisibility, G.C.D. (Greatest Common Divisors), L.C.M. (Least Common

	Multiple). Problems Based on Prime Numbers. Fundamental Theorem of Arithmetic.
Week 10	- Unit IV: Congruences and Theorems - Topics: Linear Congruence. Euler’s Theorem, Fermat’s Theorem. Wilson’s Theorem and its Converse.
Week 11	- Unit IV: Advanced Theorems - Topics: Chinese Remainder Theorem. Applications of Chinese Remainder Theorem. Review of Theorems and Problem-Solving.
Week 12	Revision and Mid-Term Review - Topics: Revision of Unit I and II Concepts. Revision of Unit III Concepts. Mid-Term Review and Problem-Solving Session.
Week 13	Additional Topics and Clarifications - Topics: Advanced Problems on Matrices and Determinants. Clarifications on Polynomial Equations. Advanced Problems on Number Theory.
Week 14	Final Review and Exam Preparation - Topics: Comprehensive Review of All Units. Sample Question Discussion. Last-Minute Clarifications and Exam Strategy.
Week 15	- Wrap-Up and Final Q&A

	- Topics: Final Wrap-Up. Q&A Session. Final Preparations for Exams.

Note: Adjustments in lecture content may be made based on student progress, holidays and comprehension.

Lesson Plan

Teacher Santosh Devi
Class B.A.I(ist sem)

Session 2023-24
Subject Programming in Python

Week 1	Introduction to PYTHON Language Overview of PYTHON, its usage, significance in modern computation. The history of PYTHON Language Historical background and evolution of the PYTHON language.
Week 2	Basic commands and applications of PYTHON Language Introduction to basic commands, syntax, and application areas in Python. Basic operators and functions in PYTHON Language

	Introduction to arithmetic, relational, and logical operators. Functions in Python.
Week 3	Explore different menus in PYTHON Language Detailed walkthrough of Python IDEs, menu options, and their functions. Keywords/Reserved words in PYTHON Language List and explanation of Python's reserved words and their usage.
Week 4	Use of predefined functions in PYTHON Language Utilization of built-in functions in Python, examples, and use cases. Basic operations on matrices Introduction to matrices, matrix operations in Python.
Week 5	Finding the determinant of a matrix (order up to four) Calculation methods for determinants, practical examples using Python. Computing inverse of square matrix (order up to four) Techniques for finding matrix inverses, Python implementations.
Week 6	Finding Eigenvalues of square matrix (order up to four) Explanation and computation of Eigenvalues in Python. Finding Eigenvectors of square matrix (order up to four) Calculation of Eigenvectors using Python, applications.

Week 7	Solving system of linear equations Methods for solving linear equations using Python, practical examples. Finding roots of quadratic, cubic, and biquadratic equations Techniques and Python tools for solving higher-order equations.
Week 8	Finding multiple roots of algebraic equations Identifying and solving multiple roots, Python implementations. Discussing the nature of roots of an equation Explanation of root types, solving for real and complex roots in Python.
Week 9	Learning the concept of divisibility in integers Introduction to divisibility rules, examples in Python. Finding the number of divisors of an integer Calculation methods and implementation in Python.
Week 10	Finding GCD and LCM of two integers Explanation and computation of GCD and LCM using Python. Finding the remainder of an integer when divided by another integer Modulo operation, practical examples using Python.
Week 11	Finding integers \(x \) and \(y \) such that \(d = ax + by \) where \(d \) is the gcd of \(a \) and \(b \) Extended Euclidean algorithm, Python implementation. Solving problems based on the concept of

	primes Introduction to prime number theory, solving related problems using Python.
Week 12	Solving problems based on the concept of linear congruence Explanation and problem-solving techniques for linear congruences in Python. Revision of all PYTHON Language topics (Part A) Review of Python concepts covered so far, preparation for upcoming exams.
Week 13	Revision of Basic Algebra and Number Theory topics (Part B) Review of algebraic concepts and number theory, practical applications. Practice problems for PYTHON Language Hands-on practice session for Python topics.
Week 14	Practice problems for Algebra and Number Theory Hands-on problem-solving for algebra and number theory concepts. Review of practical assignments Review and feedback on practical notebook assignments.
Week 15	Mock Test on entire syllabus Conducting a comprehensive test on all topics covered. Discussion of the Mock Test and final revisions Review of test results, final preparation for exams.

Note: Adjustments in lecture content may be made based on student progress, holidays and comprehension.

Lesson Plan

Teacher Santosh Devi
Class B.Sc.Hons.(ist sem)

Session 2023-24
Subject Calculus

Week 1	Introduction to Calculus Definition of the limit of a function. Basic properties of limits and continuity. Classification of discontinuities. Differentiability and successive differentiation. Leibnitz theorem.
Week 2	Series Expansions Maclaurin series expansions. Taylor series expansions. Introduction to Asymptotes in Cartesian Coordinates.
Week 3	Asymptotes and Curvature Asymptotes in Cartesian coordinates. Intersection of curve and its asymptotes. Asymptotes in polar coordinates. Curvature and radius of curvature for Cartesian curves.

Week 4	Curvature and Radius Curvature and radius of curvature for parametric curves. Curvature and radius of curvature for polar curves. Newton’s method. Radius of curvature for pedal curves.
Week 5	Advanced Curvature Topics Tangential polar equations. Centre of curvature. Circle of curvature. Chord of curvature and evolutes.
Week 6	Tests and Inflection Points Tests for concavity and convexity. Points of inflexion. Multiple points. Cusps, nodes, and conjugate points. Types of cusps.
Week 7	Tracing Curves Tracing of curves in Cartesian coordinates. Tracing of curves in parametric coordinates. Tracing of curves in polar coordinates. Reduction formulae. Rectification and intrinsic equations of curves.
Week 8	Area and Volume Calculations Quadrature (area) and sectorial area. Area bounded by closed curves. Volumes and surfaces of solids of revolution.
Week 9	Theorems Theorems of Pappus. Theorem of Guilden.
Week 10	Review and Problem Solving

	Review of Section I: Limits and Continuity. Review of Section II: Curvature and Asymptotes. Review of Section III: Tracing Curves. Advanced problems in limits, curvature, and quadrature.
Week 11	Mid-Term Preparation Mid-term tests and solutions. Revision of challenging topics. Group discussions and doubt-clearing sessions.
Week 12	Final Examination Preparation Mock tests and discussions. Final revision and doubt-clearing sessions. Preparation tips and study material distribution.
Week 13	Additional Activities Special lectures on the historical development of calculus. Guest lectures (if applicable). Review of previous years' examination questions.
Week 14	Final Revision Week Final doubt-clearing sessions. Extra classes/remedial classes (if required). Additional student-requested session
Week 15	Mock Test on entire syllabus Conducting a comprehensive test on all topics covered. Discussion of the Mock Test and final revisions Review of test results, final preparation for exams.

Note: Adjustments in lecture content may be made based on student progress, holidays and comprehension.

Lesson Plan

Teacher Santosh Devi

Class B.Sc 2nd.Hons.(3rd sem)

Session 2023-24

Subject Vector Calculus

Week 1	Introduction to Vector Calculus Section I: Scalar and vector product of three vectors, product of four vectors
Week 2	Section I: Reciprocal vectors Section I: Vector differentiation
Week 3	Section I: Scalar Valued point functions, vector valued point functions Section I: Derivative along a curve, directional derivatives
Week 4	Review of Section I Topics Section II: Gradient of a scalar point function
Week 5	Section II: Geometrical interpretation of grad Ø, character of gradient as a point function
Week 6	Section II: Divergence and curl of vector point function, characters of Div \(\vec{F}\) and Curl \(\vec{F}\) as point function Examples of Gradient, Divergence, Curl

Week 7	Section II: Divergence and curl of sums and products Section II: Vector identities related to Gradient, Divergence, Curl
Week 8	Section II: Laplacian operator Review of Section II Topics
Week 9	Section III: Orthogonal curvilinear coordinates Conditions for orthogonality, fundamental triad of mutually orthogonal unit vectors
Week 10	Section III: Gradient, Divergence, Curl and Laplacian operators in terms of orthogonal curvilinear coordinates
Week 11	Section III: Cylindrical coordinates Section III: Spherical coordinates
Week 12	Review of Section III Topics Section IV: Vector integration
Week 13	Section IV: Line integral, Surface integral Section IV: Volume integral
Week 14	Section IV: Theorems of Gauss, Green & Stokes Problems based on these theorems
Week 15	Review and Revision Doubt Clearing Session Sample Paper Discussion

Note: Adjustments in lecture content may be made based on student progress, holidays and comprehension.

Lesson Plan

Teacher Santosh Devi and Dhanesh Kumar

Class B.Sc hons. (ist sem)

Session 2023-24

Subject Value Added Course

Week 1	Introduction to the development of Indian mathematics. Discuss the influence of the Vedic period on mathematics.
Week 2	Mathematical Ideas in the Vedas and Ancient Manuscripts Explore mathematical concepts found in the Vedas. Study manuscripts detailing ancient Indian mathematics.
Week 3	Contributions of Early Mathematicians Baudhayan, Pingala Discuss their life, background, notable works, and mathematical contributions
Week 4	Contributions of Classical Mathematicians - Part I Aryabhata, Brahmagupta Overview of their contributions to Indian mathematics and their key works.
Week 5	Contributions of Classical Mathematicians - Part II Bhaskaracharya, Mahavira Discuss their mathematical developments and impact.
Week 6	Kerala School of Mathematics Madhava of Sangamagrama

	Study the mathematical advancements made by the Kerala School, focusing on calculus and infinite series.
Week 7	Other Significant Mathematicians Nilakantha Somayaji, Jyeshthadeva Review their historical backgrounds and contributions
Week 8	Introduction to Modern Indian Mathematics Overview of the transition from ancient to modern mathematics in India. Focus on early developments in modern Indian mathematics.
Week 9	Pioneering Modern Mathematicians - Part I Srinivasa Ramanujan Explore his early life, education, and major contributions to number theory.
Week 10	Pioneering Modern Mathematicians - Part II Satyendra Nath Bose, Radhanath Sikdar Discuss their contributions to mathematics and physics.
Week 11	Contributions to Statistics and Mathematics P.C. Mahalanobis, D.R. Kaprekar Review their life, work in statistics, and contributions to mathematical concepts.
Week 12	Modern Mathematical Awards and Prizes Discuss the Ramanujan Award, Fields Medal, Abel Prize.- Explain their significance in the world of mathematics.
Week 13	Contributions of Notable Mathematicians - Part I Subrahmanyan Chandrasekhar, C.R. Rao Study their biographies and contributions to

	mathematics and related fields.
Week 14	Contributions of Notable Mathematicians - Part II S.R. Srinivasa Varadhan, Akshay Venkatesh Discuss their significant achievements and influence on modern mathematics.
Week 15	Summary and Review Recap the key contributions from both ancient and modern Indian mathematicians. Prepare for final assessments and discussions on the evolution of Indian mathematics.

Note: Adjustments in lecture content may be made based on student progress, holidays and comprehension.

Lesson Plan

Teacher Santosh Devi and Dhanesh Kumar

Class B.Sc 2nd year(3rd sem)

Session 2023-24

Subject Progrmming in C and Numerical Method Lab

Week 1	Introduction to the programming environment and basic C-programming setup. Implement Newton’s Forward Interpolation.
Week 2	Implement Newton’s Backward Interpolation.
Week 3	Implement Gauss’s Forward Interpolation.
Week 4	Implement Gauss’s Backward Interpolation.

Week 5	Implement Lagrange’s Interpolation Formula.
Week 6	Find the roots of algebraic and transcendental equations using the Bisection Method.
Week 7	Find the roots of algebraic and transcendental equations using the Regula-Falsi Method.
Week 8	Find the roots of algebraic and transcendental equations using the Secant Method.
Week 9	Find the roots of algebraic and transcendental equations using the Newton-Raphson Method.
Week 10	Solve a system of linear equations using the Gauss Elimination Method.
Week 11	Solve a system of linear equations using the Gauss-Seidal Iteration Method.
Week 12	Solve a system of linear equations using the Gauss-Jordan Method. Find the largest eigenvalue of a matrix using the Power Method.
Week 13	Integrate numerically using the Trapezoidal Rule. Integrate numerically using Simpson’s One-Third Rule
Week 14	Find the numerical solution of ordinary differential equations using Euler’s/Modified Euler’s Method.
Week 15	Find the numerical solution of ordinary differential equations using the Runge-Kutta Method. Debugging and refining all previous assignments.

Note: Adjustments in lecture content may be made based on student progress, holidays and comprehension.

Department: Mathematics

Name of Teacher: Sh. Sandeep Kumar
Class: B.A. Ist
Subject: Mathematics (MDC)
Paper: Mathematics for Everyday Life

Unit	Description of Chapter / Topics	Duration	Remarks
Unit-1	Number system, LCM and HCF of numbers, decimal fractions, square and cube roots. Average, Problems on Numbers, problems on Ages, Surds and Indices.	22-07-2024 to 17-08-2024	
Unit-2	Percentage, Profit and Loss, Ratio and Proportion, Partnership, Chain Rule, problems based on the topics of Calendar and Clocks.	20-08-2024 to 15-09-2024	
Unit-3	Time and Work, Time and Distance, Area, Volume and Surface Area.	16-09-2024 to 05-10-2024	
Revision	Revision of the Syllabus	06-10-2024 to Exam	27-10-2024 to 03-11-2024 Diwali Vacation

Unit Wise Lesson Plan for Odd Semester 2024-25

Name of the Teacher: - Dr. Tamanna Rani

Class- B.Sc. (5th Sem.), Subject - Physics, Paper- Elements of Modern Physics, CPL-501

Unit	Description of Topics	Duration	Assignment/Test
Unit-1 **Introduction to Quantization**	Properties of Thermal Radiation, Spectral Distribution of Blackbody Radiation, Kirchhoff's Law, Stefan-Boltzmann Law and Wien's Distribution and Displacement law, Rayleigh-Jean's Law, Ultraviolet Catastrophe, Planck's Quantum Postulates, Planck's Law of Blackbody Radiation: Experimental Verification. Photo-	3rd week of July to 2nd week of September	First assignment in last week of August

	electric effect and Compton scattering; Pair production and annihilation, Bremsstrahlung effect, Cherenkov radiation, Production of X-rays.		
Unit II **Bohr Model**	Drawbacks of Rutherford model, Bohr atomic model; Bohr's quantization rule and atomic stability; Calculation of energy levels for hydrogen like atoms and their spectra, Effect of nuclear mass on spectra, Correspondence principle. Fundamentals of Wave Mechanics: De Broglie wavelength and matter waves; Wave-particle duality; Frank-Hertz, Davison and Germer experiment, phase velocity, group velocity and their relations.	3rd week of September to first week of October	Unit test in last week of September

epartment: Physics

Name of Teacher: Dr. Pawan Kumar Class: B. Sc 3rd NM

Subject: Physics Paper: Nuclear Physics

Unit	Description of Chapter / Topics	Duration	Remarks
Unit-1	Basic Properties of Nuclei Nuclear composition (p-e and p-n hypotheses), Nuclear properties; quadruple moment (shape concept) and binding energy, nuclear binding energy curve. Law of Radioactive Decay, Half-life, Radioactive Series, a-decay: Range of a-particles,-particle Spectra, ß-decay, Energy Spectra and Neutrino Hypothesis, y-decay: Origin of y-rays.	22-07-2024 to 17-08-2024	
Unit-2	Nuclear Models and Nuclear Forces: Similarity between nuclear matter and liquid drop, Liquid Drop Model, Semi-classical Mass formula, Magic Nuclear Shell Model (qualitative only) and its application, Meson Theory of Nuclear Forces.	20-08-2024 to 14-09-2024	Test
Unit-3	Radiation Interaction: Interaction of heavy charged particles (proton, Alpha particles etc.); Energy loss of heavy charged particle (Discussion of Bethe formula), Compton and pair production effect), Absorption of Gamma rays: Types of	15-09-2024 to 06-10-2024	Assignment

	nuclear reactions, Concept of reaction cross-section, Concept of Compound and Direct Reactions.		
Unit-4	Nuclear Radiation Detectors: Gas filled counters; Ionization chamber, proportional counter, G.M. Counter Nuclear Reactors: General aspects of reactor design, Nuclear fission reactor Particle Accelerators: Particle Accelerator facilities in India, Linear Accelerator, Cyclotron, Synchrotron. Revision of the Syllabus	07-10-2024 to Exam	27-10-2024 to 03-11-2024 Diwali Vacation

Department: Physics

Name of Teacher: Dr. Pawan Kumar Class: B. Sc. 1st NM

Subject: Physics Paper: Mechanics 1

Unit	Description of Chapter / Topics	Duration	Remarks
Unit-1	Fundamentals of Dynamics: Rigid body, Moment of Inertia, Radius of Gyration, Theorems of perpendicular and parallel axis (with proof), Moment of Inertia of ring, Disc, Solid sphere, Hollow sphere, Torque, Rotational Kinetic Energy, Angular momentum, Law of conservation of angular momentum, Fly wheel, Moment of Inertia of an irregular body.	22-07-2024 to 17-08-2024	
Unit-2	Deforming force, Elastic limit, stress, strain and their types, Hooke's law, Modulus of rigidity, Relation between shear angle and angle of twist, elastic energy stored/volume in Poisson's ratio and its limiting value, Elastic Constants, and their relations. Torque required for twisting cylinder, bending of beam, bending moment and its magnitude, determination of elastic constants for material of wire by Searle's method.	20-08-2024 to 14-09-2024	Test
Unit-3	Gravitation and central force motion: Law of gravitation, Gravitational potential energy, Inertial and gravitational mass, Two-body problem and its reduction Differential Equation of motion with central force and its solution, Concept of power Law Potentials, Kepler's Laws of Planetary motion.	15-09-2024 to 06-10-2024	Assignment
Unit-4	Special Theory of Relativity: Michelson's Morley experiment and its outcomes, Postulates of special theory of relativity, Lorentz Transformations, Simultaneity and order of	07-10-2024 to Exam	27-10-2024 to 03-11-2024 Diwali Vacation

	events, Lorentz contraction, Time dilation, Relativistic transformation of velocity, relativistic addition Revision of the Syllabus		

Name of the Teacher: - Dr. Tamanna Rani

Class B.Sc. (5th Sem.), Subject: - Physics, Paper-Nuclear Physics, CPL-502

Unit	Description of Topics	Duration	Assignment/Test
Unit-1 **Basic Properties of Nuclei**	Nuclear composition (p-e and p-n hypotheses), Nuclear properties; Nuclear mass, size, spin, parity, magnetic dipole moment, quadruple moment (shape concept) and binding energy, nuclear binding energy curve. Radioactivity: Law of Radioactive Decay, Half-life, Radioactive Series, α -decay: Range of α -particles, Geiger-Nuttal law and α -particle Spectra, β -decay, Energy Spectra and Neutrino Hypothesis, γ -decay, Origin of γ -rays.	3rd week of July to 2nd week of September	First assignment in last week of August
Unit II **Nuclear Models and Nuclear Forces**	Similarity between nuclear matter and liquid drop, Liquid Drop Model, Semi-classical Mass formula, Limitations of liquid drop model, Magic number, Experimental signature of shell structure in nuclei, Nuclear Shell Model (qualitative only) and its application, Meson Theory of Nuclear Forces.	3rd week of September to first week of October	Unit test in last week of September
Unit III **Radiation Interaction**	Interaction of heavy charged particles (proton, Alpha particles etc.); Energy loss of heavy charged particle (Discussion of	Second week of October to last week of	Second assignment in last week of October

	Bethe formula), Range of alpha particles. Interaction of light charged particle (Beta particle), Interaction of Gamma Ray; Passage of Gamma radiations through matter (Photoelectric, Compton and pair production effect), Absorption of Gamma rays (Mass attenuation coefficient), Nuclear Reactions: Types of nuclear reactions, Concept of reaction cross-section, Concept of Compound and Nuclear Reactions: Types of nuclear reactions, Concept of reaction cross-section, Concept of Compound and Direct Reactions.	October	
Unit IV **Nuclear Radiation Detectors**	Gas filled counters; Ionization chamber, proportional counter, G.M. Counter (detailed study), Basic principle of scintillation counter and semiconductor detectors. Nuclear Reactors: General aspects of reactor design, Nuclear fission reactor (Principle, construction, working and use) Particle Accelerators: Particle Accelerator facilities in India, Linear Accelerator, Cyclotron, Synchrotron	First week of November to third week of November	
Revision, solution of queries, active participation of students	Last week of November		

Government College Hansi

Unit wise Lesson Plan for session 2024--2025

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	Political Science: Definition, Nature & Scope; Relation of Political Science with the Social Sciences, l Approaches to the study of Political Science.	4th week of July to 4th week of Aug.	Verbal Test

Unit 2	State: Definition and Elements, Theories of the Origin of State; Social Contract, Evolutionary , Marxist and Divine Theory.	1st week of Sept.to 1St week of Oct.	1st Assignment in 2nd week of October
Unit 3	Sovereignty; Types and features; Concept of Welfare State, Liberty, Equality, Rights & Justice.	2nd week of Oct. to 4th week of Oct	
Unit 4	Theory & Practice of Govt.: Organs of Government and their relationship, Operational dynamics Political Parties, Pressure Groups and Bureaucracy.	1st week of Nov.to 3rd week of Nov.	2nd Assignment in the 3rd week of November
Revision	Revision, problem solving	4th week of Nov.	

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	4th week of July to 4th week of August	Verbal Test
Unit 2	Approaches to the study of Comparative Politics	1st week of September to 4th week of September	1st Assignment in 1st week of September
Unit 3	Constitutionalism	1st week of October to 3rd week of October	Minor test in the last week of September
Unit 4	Constitutional structure	4th week of October to 2nd week of November	2nd Assignment in the 2nd week of October
Revision	Revision, problem solving	2nd and 3rd week of November	

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

Unit	**Description of Chapter/Topic**	**Duration**	**Assignment/Test**

Unit 1	RajaRamMohanRoy, Swami Dayanand	4th week of July to 4th week of Aug.	Verbal Test
Unit 2	Swami Vivekanand, Aurobindo Ghosh	1st week of Sept.to 1St week of Oct.	1st Assignment in 2nd week of October
Unit 3	Lala Lajpat Rai, Bal Gangadhar Tilak	2nd week of Oct. to 4th week of Oct	
Unit 4	DadaBhaiNauroji, Gopal krishan Gokhle	1st week of Nov.to 3rd week of Nov.	2nd Assignment in the 3rd week of November
Revision	Revision, problem solving	4th week of Nov.	

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	22/07/24 TO 7/09/24	
UNIT - 2	NITI SHATAK SHALOKAS 26 TO 50	9/09/24 TO 12/10/24	1ST ASSIGNMENT
UNIT - 3	HISTORY OF SANSKRIT LITERATURE	14/10/24 TO 26/10/24	2ND ASSIGNMENT
UNIT - 4	LAGHUSIDHANT KOUMIDI KARKA PARKARAN	4/11/24 TO 22/11/24	TEST

EPARTMENT : SANSKRIT CLASS BA 3RD SEM

SUBJECT : SKT (C) PAPER SKT (C)

UNIT	DESCRIPTION OF TOPIC	DURATION	ASSIGNMENT/TEST
UNIT	□□ □ ट	22/07/24	

-1		TO 7/09/24	
UNIT-2	□□□ट क□□□□□द□□□	9/09/24 TO 12/10/24	1ST ASSIGNMENT
UNIT-3	□□□□त □□र□□यय	14/10/24 TO 26/10/24	2ND ASSIGNMENT
UNIT-4	स□□स	4/11/24 TO 22/1	TEST

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