Department of Computer Science, Govt. College Kheri Chopta (Hisar)

Lesson Plan 2025-26

Name of Assistant/Associate Professor: Dinesh
Class and Section: BA (Computer App.) –III Year 6th Sem.
Subject: Computer Graphics

Jan 2025	
	Topic Covered
Week 3	Introduction: Historical perspective of Computer Graphics, Basic elements of Computer graphics, Modelling, Rendering, Animation, Applications of Computer Graphics
Week 4	Input Devices: Keyboard, Mouse, Light Pen, Graphic Tablets , Joysticks, Trackball, Flatbed Scanner
February 2025	
	Topic Covered
Week 1	Hardcopy Devices: Laser Printer, Flatbed Plotters
Week 2	Video Display Devices: Pixel, Resolution, Aspect Ratio, Refresh Rate and Interlacing
Week 3	Cathode Ray Tube, Flat Panel Display-LCD and Plasma Panel
Week 4	Raster and Random scan display system.
March 2025	
	Topic Covered
Week 1	Holi Holidays
Week 2	Circle Generation Algorithm: Bresenham's Circle Drawing, Midpoint Circle Drawing Algorithm, Polygon Filling Algorithm-San Line Algorithm,Viewing and Clipping – Point Clipping and Line Clipping
Week 3	Line Generation Algorithm: DDA, Bresenham's
Week 4	Cohen-Sutherland Line Clipping Algorithm,Polygon Clipping(Sutherland Hodgman Algorithm)
April 2025	
	Topic Covered
Week 1	2-Dimensional Graphics: Cartesian and homogeneous Co-ordinate System, Geometric Transformations
Week 2	Translation, Scaling, Rotation, Reflection
Week 3	3-Dimensional Graphics: Geometric Transformations(Translation, Scaling,
Week 4	Rotation, Reflection, Mathematics of Projections (Parallel and Perspective)

Signature of Teacher

Department of Computer Science, Govt. College Kheri Chopta (Hisar)

Name of Assistant/Associate Professor: Dinesh

Class and Section: BA (Computer App.) –III Year 6th Sem.

Subject: Python Programming

Jan 2025	
	Topic Covered
Week 3	Python Programming: history and features, interpreter, variable, identifiers, lteral, token, keyword, data type, operators: arithmetic, relational, bitwise, assignment, membership, identity, operator precedence, comment, indentation
Week 4	Built-in functions: input, eval, print , type, round, min, max, pow, type conversion, random no. Generation. Mathematical functions assert statement Control statements: If Condition, for and while statements, break, continue and pass statements
Feb 2025	
	Topic Covered
Week 1	Functions: definition, call, function agrumements: variable, default, keywords, arbitrary command line arguments, Global local variables
Week 2	Strings data type, String operations- Concatenation, Repetition, Membership, Slicing operation
Week 3	String methods- count, find, rfind, title, lower, upper, swapcase, islower, isupper, istitle, isalpha, isdigit, isalnum
Week 4	Lists operations-multiplication, concatenation, length, indexing, slicing, min, max,sum, membership operator, list functions
March 2025	
	Topic Covered
Week 1	Holi Holidays
Week 2	OOP: introduction to classes, methods, class object, instance object, method object
Week 3	Recursion solution for problems on Numbers, String and list
Week 4	Class as abstract data type, data class.
April 2025	
	Topic Covered
Week 1	Access attributes using functions
Week 2	Functions-getattr, hasattr, setattr, delattr
Week 3	Built-in class Attributes of class object(dict, doc, name, module)
Week 4	Graphics: Screen objects, Screen objects Methods

Signature of Teacher

Dept. of Computer Science, Government College Kheri Chopta, Hisar

Name and Designation : Dinesh, Assistant Professor (Computer Science)

Class: BA-II (IV Sem) **Computer Networks (C24COS401T)**

Session: 2025-26 (Even Semester)

Time Period		Topic
Jan	Week-3	Course Introduction & Overview, Basics of Data Communication Components
	Week-4	Data Representation, Data Flow
Feb	Week-1	Network Uses & Applications, Network Topologies (Bus, Star, Ring, Mesh, Hybrid), Network Services
	Week-2	OSI Model (7 layers, functions), TCP/IP Model (comparison with OSI)
	Week-3	Network Categories: LAN, MAN, WAN Guided Transmission Media (Twisted Pair, Coaxial, Optical Fiber)
	Week-4	Wireless Transmission Media, Networking Devices: Hub, Repeater, Bridge, Networking Devices: Switch, Router, Gateway, Modem
March	Week-1	Holi Holidays
	Week-2	Data Link Layer: Design Issues, Framing Techniques, Error Detection & Correction, Framing Protocols
	Week-3	Switching Techniques: Circuit Switching, Packet Switching, Message Switching
	Week-4	Flow Control Protocols: Stop-and-Wait, Sliding Window
	Week-5	Sliding Window Protocols: Go-Back-N, Selective Repeat
April	Week-1	Multiple Access Protocols: ALOHA, Slotted ALOHA, CSMA, CSMA/CD
	Week-2	Routing Algorithms: Shortest Path, Flooding, Distance Vector Routing
	Week-3	Link State Routing, Hierarchical Routing, Congestion Control Algorithms
	Week-4	Transport Layer: Services, Addressing, Multiplexing TCP & UDP, TCP Segment, Connection
	Week-5	Application Layer: DNS, FTP, TELNET, HTTP, SMTP, Email, WWW
May	Week-1	Final Revision + Doubt Session + Test Preparation

Dept. of Computer Science, Government College Kheri Chopta, Hisar

Name and Designation : Dinesh, Assistant Professor (Computer Science)

Class: BA-I (IInd Sem) **Data Structure using 'C'**

Session: 2025-26 (Even Semester)

Time Period		Topic
Jan	Week-3	Introduction to Data Structures
	Week-4	Introduction to Complexity
Feb	Week-1	Introduction to Data Structures, Classification of data structure, Sorting: Bubble sort, Insertion sort, Selection sort, Merge Sort, Quick sort.Comparison of various Searching and Sorting algorithms.
	Week-2	Abstract data type; Data Structure Operations,Applications of Data Structure.
	Week-3	Definition of array, Single and Multi-dimensional Arrays, Representation of single and 2- dimentional arrays and their address calculation,
	Week-4	basic operations on single dimensional arrays, Algorithm for insertion and deletion operations; Sparse Matrices and its representation.
March	Week-1	Vacations (Holi)
	Week-2	Definition of stack, Operations on stack, Algorithms for push and pop operations using array. Stack Applications: Prefix, Infix and Postfix expressions,
	Week-3	Conversion of Infix expressions to Postfix expression using stack;
	Week-4	Recursion.
	Week-5	Queues: Introduction to Queue. Operations on Queues, Circular queue, Algorithm for insertion and deletion in simple queue and circular queue using array.
April	Week-1	De-queue, Priority Queues. Linked Lists: Introduction, Array vs Linked list; Singly, Doubly and Circular linked Lists and representation of linked lists in memory.
	Week-2	Implementation of Stack and simple Queue as single Linked List.
	Week-3	Trees: Introduction to Tree as a data structure, Basic Terminology; Binary Trees, Traversal of binary trees: Inorder
	Week-4	Pre-order & post-order. Binary tree non recursive traversal algorithms. Binary Search Tree, (Creation, and Traversals of Binary Search Trees
	Week-5	Graphs: Introduction, Memory Representation, Graph Traversal (DFS and BFS), Searching: Binary and Linear Search
May	Week-1	Revisions

Dept. of Comp. Sc. , Govt. College Kheri Chopta (Hisar)

Dinesh, Assistant Professor (Computer Science)

Lesson Plan- Skill Enhancement Course 2025-26

(Office Tools- C24SEC103T)

Month	Week	Topics Covered
January	Week 1	Course introduction; Definition & Functions of OS
	Week 2	Types of OS; Basics of OS; User Interface
	Week 3	Desktop; Icons; Taskbar; Exploring Computer
February	Week 1	Menus; Menu Selection; File & Folder Management
	Week 2	Control Panel; Add/Remove Software & Hardware; Utilities
	Week 3	Introduction to Word Processing; Features; Menus
	Week 4	Creating; Editing; Formatting Documents
March	Week 1	Holi Breaks
	Week 2	Spell Check; Printing; Practice,Views; Tables
	Week 3	Page Setup; Themes; Style Sets
	Week 4	Headers & Footers; Revision; Internal Assessment
April	Week 1	Introduction to Spreadsheets; Applications; Creation
	Week 2	Data Entry; Cell Formatting; Copying Cells
	Week 3	Functions; Charts
	Week 4	Sorting; Filtering; Presentation Basics; Views
	Week 5	Animation; Objects; Printing; Final Revision