

Tau Devi Lal Govt. Post Graduate College for Women, Murthal (Sonapat)

Lesson Plan

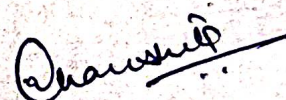
Name of the Faculty- Sh. Amit Kumar Kaushik

Class and Section: PGDCA SEM-I

Session-2025-26

Subject: Internet and Web Technology PGDCA-105

Month	Topic
July-25	Introduction to the Internet and the World Wide Web, Web Pages; Hyper Text Transfer Protocol (HTTP);
August-25	File Transfer Protocol (FTP) Domain Names; URL; Website, Web browser, Web Servers; Web Hosting.HTML.
September-25	Introduction, Objectives, Introduction to Universal Resource Identifier (URI),History of HTML, Structure of HTML Basic Tags of HTML, Planning for designing Web pages, Model and structure for a Website, Developing Websites, Tag; Creating Links: Link to other HTML documents and same HTML documents .List, Tables: Creating Tables, Frames, Forms.
October-25	Java Script Introduction to Scripting, JavaScript: Control Statements, JavaScript: Functions, JavaScript: Arrays JavaScript: Objects, CSS, External Style Sheets, Internal Style Sheets, Inline Style, The class selector, div & span tag.
November-25	DOM HTML DOM, XML: Introduction; Features of XML, Dynamic HTML (DHTML), DHTML form, XML DOM. CGI/PERL, Introduction to CGI, Testing & Debugging Perl CGI Script.



Signature of the Faculty

Lesson Plan

Name of the Faculty- Sh. Amit Kumar Kaushik

Class and Section: PGDCA SEM-I

Session-2025-26

Subject: Operating System PGDCA-107

Month	Topic
July-25	Operating Systems Overview: Introduction, operating system operations, process management, memory management, storage management, protection and security, distributed systems.
August-25	Operating Systems Structures: Operating system services and systems calls, system programs, operating system structure, operating systems generations.
September-25	Process Management: Process concepts, process state, process control block, scheduling queues. of UNIX/LINUX process scheduling, multithreaded programming, threads in UNIX/LINUX, comparison and windows. Concurrency and Synchronization: Process synchronization, critical section problem, Peterson's solution, synchronization hardware, semaphores, classic problems of synchronization, readers and writers problem, dining philosophers problem, monitors, synchronization examples(Solaris), atomic transactions, Comparison of UNIX/LINUX and windows.
October-25	Deadlocks: System model, deadlock characterization, deadlock prevention, detection and recovery from deadlock banker's algorithm. Memory Management: Swapping, contiguous memory allocation, paging, structure of the page frames, table, segmentation, virtual memory, demand paging, page-replacement algorithms, allocation of thrashing, case study -- UNIX/LINUX..
November-25	File System: Concept of a file, access methods, directory structure, file system mounting, file sharing, protection. File system implementation: file system structure, file system implementation, directory implementation, allocation methods, free-space management, efficiency and performance, comparison of UNIX/LINUX and windows.


Signature of the Faculty

Tau Devi Lal Govt. Post Graduate College for Women, Murthal (Sonapat)

Lesson Plan

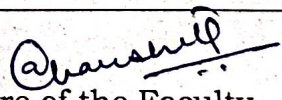
Name of the Faculty- Sh. Amit Kumar Kaushik

Class and Section: PGDCA SEM-I

Session-2025-26

Subject: Computer Networks PGDCA-109

Month	Topic
July-25	Data Communication Components: Representation of data and its flow Networks, Various Connection Topology, Protocols and Standards of ISO/OSI model, TCP/IP Model.
August-25	Transmission Media, LAN: Wired LAN, Wireless LANs, Connecting LAN and Virtual LAN, Techniques for Bandwidth utilization: Multiplexing - Frequency division, Time division and Wavelength division, Concepts on spread spectrum.
September-25	Data Link Layer And Medium Access Sub Layer: Error Detection and Error Correction Fundamentals, Block coding, Hamming Distance, CRC; Flow Control and Error control protocols - Stop and Wait, Go back - N ARQ, Selective Repeat ARQ, Sliding Window, Piggybacking, Random Access, Multiple access protocols -Pure ALOHA, Slotted ALOHA, CSMA/CA.
October-25	Network Layer: Switching, Logical addressing - IPV4, IPV6; Address mapping - ARP, RARP, BOOTP and DHCP-Delivery, Forwarding and Unicast Routing protocols: link state, distance vector, etc.
November-25	Transport Layer: Process to Process Communication, User Datagram Protocol (UDP), Transmission Control Protocol (TCP), SCTP Congestion Control; Quality of Service, QoS improving techniques: Leaky Bucket and Token Bucket algorithm. APPLICATION LAYER Domain Name Space (DNS), DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWw, HTTP, SNMP, Bluetooth, Firewalls, Basic concepts of Cryptography


Signature of the Faculty