

Name of the faculty
Discipline
Semester
Subject

Uma Kant
ComputerEngg.
1st
FUNDAMENTALS OF IT

30 July-2026 to 23 Nov-2026

Work load (Lecture/Practical) per week:Lectures-02,Practicals-04

Week	Theory		Practical			
	Lecture day	Topic	Signature	Practical day	Topic	Signature
1	1	Brief history of development of computers, Definition of Computer		1	Browser features, browsing, using various search engines, writing search queries	
	2	Block diagram of a Computer, Hardware, Software		2	Visit various e-governance/Digital India portals, understand their features, services	
2	3	Bootling: Cold and Hot Bootling, Interaction between the CPU and Memory with Input/Output devices		3	Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/interfaces and related cables, etc.	
	4	Function of CPU and major functional parts of CPU		4	Using Administrative Tools/Control Panel Settings of Operating Systems	
3	5	Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory, List types of memory used in a Computer ,cache memory		5	Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software.	
4	6	Use of storage devices in a Computer, CPU speed and CPU word length		6	Explore features of Open Office tools and MS-Office, create documents, create presentation, create spread sheet, using these features, do it multiple times	
5	7	Understanding browser, Introduction to WWW		7	Working with Conversion Software like pdf To Word, Word To PPT, etc.	
	8	Efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals		8	Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Applications	
6	9	Advantages of Email, Various email service providers		9	Creating email id, sending and receiving mails with attachments.	
	10	Creation of email id, sending and receiving emails, attaching documents with email and drive.		10	Using Google drive, Google calendar	
7	11	Effective use of Gmail, G-Drive, Google Calendar,		11	Create Flow chart and Algorithm for the following.	
	12	Google Sites, Google Sheets			i. Addition of numbers and display result.	

8	13	Online mode of communication Using Google Meet & Web Ex.		12	ii.To convert temperature from Celsius to Fahrenheit.	
	14	Revisionchl			iii.To find Area and Perimeter of Square.	
9	15	Introduction to Programming,		13	iv.Swap Two Numbers	
	16	Steps involved in problem solving, Definition of Algorithm, Definition of Flowchart, Symbols			v.find the smallest of two numbers	
10	17	Steps involved in algorithm development, Algorithms for simple problems		14	vi. Find whether given number is Even or Odd	
	18	flowcharts for simple Problems, flowcharts for simple Problems			vii. To print first n even Numbers.	
11	19	Office Tools like Libre Office/OpenOffice/MSOffice.		15	viii. find sum of series $1+2+3+\dots+N$	
	20	Open Office Writer–Typesetting Text and Basic Formatting,			ix .print multiplication Table Of a number	
12	21	Inserting Images, Hyperlinks		16	x. generate first n Fibonacci terms $0,1,1,2,3,5\dots n$ ($n>2$)	
	22	Bookmarks, Tables and Table Properties in Writer			xi.sum and average of given series of numbers	
13	23	Introducing LibreOffice/OpenOffice Calc,		17	xii.Factorial of number ($n!=1\times 2\times 3\times \dots n$)	
	24	Working with Cells, Sheets, data, tables			xiii.Armstrong Number	
14	25	Formulae and functions		18	xiv.Find whether given number is Prime or not	
	26	Open Office Impress–Creating and Viewing Presentations				
15	27	Inserting Pictures and Tables ,Slide				
	28	Master and Slide Design				
13	29	Custom Animation, Use of Social Media				
	30	Introduction to Digital Marketing				
14	31	Why Digital Marketing				
	32	Characteristics and Tools of Digital Marketing				
15	33	Effective use of Social Media like LinkedIn Google+, Facebook,				
	34	Features ,Advantages and Disadvantages of Social media				

Lesson Plan

Name of faculty : UMA KANT
Discipline : Comp. Engg
Year : 1st Sem
Subject : Computer workshop
Lesson Plan Duration : 15 weeks

week	Practical Topic
1	Anatomy of a Computer, Foundations of Modern Information Technology, The Central Processing Unit, How Microprocessors and Memory Chips are Made, Memory, Buses for Input and Output, communication With Peripherals.
2	Desktop: Identification of desktop and its parts, Hardware, Software and Firmware Introduction to Mother board, IO and memory expansion slots, Drives, front panel and rear panel. Processors & Bus: Introduction and types of Processor, Introduction to BUS
3	Laptop: Introduction to Laptop, advantages over Desktops Laptop components: Adapter – types, Battery – types, Laptop Keyboard and Touchpad Power Supply: Introduction to online and offline UPS, Difference between online and offline UPS
4	SMPS: Introduction to SMPS, Study of SMPS Connectors
5	Primary Memory: Introduction and types of primary memory (SDRAM, DDR RAM) Secondary Storage: Hard Disk –Working Principle of IDE, HDD Partition – Formatting, Introduction to SATA and Solid-State Drives (SSD)
6	1st Internal Sessional exam
7	Removable Storage: Introduction to CD, DVD, reading & writing operations; Introduction to Blue-ray devices Flash memory: Flash drives (pen drives), Memory cards and its types
8	Inputting Text and Graphics, State of the Art, Input and Output, Pointing Devices, Foundations of Modern Output, Display Screens, Printers, Foundations of Modern Storage, Storage Media, Increasing Data Storage Capacity, Backing up your Data, The Smart Card Keyboard: Types of keyboards (wired and wireless Keyboard), keyboards connectors, troubleshooting
9	Mouse: types, connectors, operation of Optical mouse and Troubleshooting. Printers: Introduction – Types of printers- Dot Matrix, Inkjet, LaserJet, MFP (Multi-Function Printer), advantages, disadvantages, cables and connectors, Troubleshooting. I/O Ports: Introduction and identification of Serial, Parallel, USB, HDMI.
10	Displays: Introduction to LED, LCD and TFT Displays, cables and connectors Graphic Cards: Introduction to different types of Graphics cards
11	2nd Sessional exam

12	Bios-setup: Standard CMOS setup, Advanced BIOS setup, advanced chipset features, PC Bios communication, upgrading BIOS, Flash BIOS -setup. POST and BOOTING: Definition, POST Test sequence – beep codes. Diagnostic Software and Viruses: Computer Viruses, Precautions, Anti-virus Software, Working of Antivirus software's
13	General troubleshooting of various peripheral devices (printer, pc, laptop, keyboard, mouse, monitor, hard disk)
14	Assembling and Disassembling of PC DIPLOMA IN COMPUTER ENGINEERING NSQF LEVEL - 3 HARYANA STATE BOARD OF TECHNICAL EDUCATION 29 Installation and Troubleshooting: Formatting, Partitioning and Installation of OS: Windows and Linux Installation of peripheral devices: Printers, scanner Installation of software's: application software, systems software
15	3rd Sessional Exam
16	Revision

Lesson Plan

Name of faculty Neeraj Malan

Discipline: Computer Engineering

Semester: 1st Semester

Subject: Computer Workshop

Lesson Plan Duration: 18 weeks (from July 30, 2026 to Nov23, 2026)

Work Load (Lecture/ Practical) per week (in hours): 06

Week	Date	Practical	
		Practical day	Topic (including assignment / test)
1 st	30-07-2026 to 31-07-2026	1	Introduction
2 nd	03-08-2026 to 07-08-2026	2	Anatomy of a Computer, Foundations of Modern Information Technology, The Central Processing Unit, How Microprocessors and Memory Chips are Made, Memory, Buses for Input and Output, communication With Peripherals.
3 rd	10-08-2026 to 14-08-2026	3	Desktop: Identification of desktop and its parts, Hardware, Software and Firmware Introduction to Motherboard, IO and memory expansion slots, Drives, frontpanel and rear panel. Processors & Bus: Introduction and types of Processor, Introduction to BUS
4 th	17-08-2026 to 21-08-2026	4	Laptop: Introduction to Laptop, advantages over Desktops Laptop components: Adapter – types, Battery – types, Laptop Keyboard and Touchpad Power Supply: Introduction to online and offline UPS, Difference between online and offline UPS
5 th	24-08-2026 to 28-08-2026	5	SMPS: Introduction to SMPS, Study of SMPS Connectors
6 th	31-08-2026 to 04-09-2026	6	Primary Memory: Introduction and types of primary memory (SDRAM, DDRRAM)
7 th	07-09-2026 to 11-09-2026	7	Secondary Storage: Hard Disk–Working Principle of IDE, HDD Partition–Formatting, Introduction to SATA and Solid-State Drives (SSD)
8 th	14-09-2026 to 18-09-2026	8	Sessional test
9 th	21-09-2026 to 25-09-2026	9	Removable Storage: Introduction to CD, DVD, reading & writing operations; Introduction to Blue- ray devices Flash memory: Flash drives (pendrives), Memory cards and its types
10 th	28-09-2026 to 02-10-2026	10	Inputting Text and Graphics, State of the Art, Input and Output, Pointing Devices, Foundations of Modern Output, Display Screens, Printers, Foundations of Modern Storage, Storage Media, Increasing Data Storage Capacity, Backing up your Data, The Smart Card Keyboard: Types of

			keyboards (wired and wireless Keyboard), keyboards connectors, troubleshooting
11 th	05-10-2026 to 09-10-2026	11	Mouse: types, connectors, operation of Optical mouse and Troubleshooting. Printers: Introduction–Types of printers-Dot Matrix, Inkjet, LaserJet, MFP (Multi-Function Printer), advantages, disadvantages, cables and connectors, Troubleshooting. I/O Ports: Introduction and identification of Serial, Parallel, USB, HDML.
12 th	12-10-2026 to 16-10-2026	12	Sessional test
13 th	19-10-2026 to 23-10-2026	13	Displays: Introduction to LED, LCD and TFT Displays, cables and connectors Graphic Cards: Introduction to different types of Graphics cards
14 th	26-10-2026 to 30-10-2026	14	Bios-setup: Standard CMOS setup, Advanced BIOS setup, advanced chipset features, PC Bios communication, upgrading BIOS, Flash BIOS - setup. POST and BOOTING: Definition, POST Test sequence–beep codes. Diagnostic Software and Viruses: Computer Viruses, Precautions, Anti-virus Software, Working of Antivirus software's
15 th	02-11-2026 to 06-11-2026	15	General troubleshooting of various peripheral devices (printer, pc, laptop, keyboard, mouse, monitor, hard disk)
16 th	09-11-2026 to 13-11-2026	16	Assembling and Disassembling of PC, Installation and Troubleshooting: Formatting, Partitioning and Installation of OS: Windows and Linux Installation of peripheral devices: Printers, scanner, Installation of software's: application software, systems software
17 th	16-11-2026 to 20-11-2026	17	Sessional Test
18 th	23-11-2026	18	Revision

LESSON PLAN

Name of Faculty	Ria Choudhary/Renu Kandra
Semester	3rd
Subject	DBMS
Lesson Plan duration	30/7/2026 to 23/11 /2026
Work Load per week	Lecture-2 Practical-4

		THEORY		PRACTICAL
WEEK	DATE	LECTURE DAY	TOPIC	TOPIC
IST WEEK	30-07-2026 To 31/7/26	1	Database system: Introduction to database and its purpose Characteristics of database, approach, advantage and disadvantage of database system	Exercise on creation and modification of structure of tables
		2	Classification of DBMS users: Actors on the scene- Database Administrators, Database designers, End users – System Analyst and Application Programmers	
2ND WEEK	03 Aug to 07 Aug	3	Workers behind the scene (DBMS system designers and implementers, tools developers, operator and maintenance personnel	Revision of Exercise on creation and modification of structure of tables
		4	Data Models, Schemas, instances, Database state, DBMS Architecture: External level, Conceptual level, Internal level, Mappings Data Independence: Logical data	
3rd WEEK	10 Aug to 14 Aug	5	Database Languages, DBMS interfaces, Classification of DBMS- Centralized, Distributed, Parallel and Object Based	Exercise on inserting and deleting values from tables
		6	Data modeling using E-R Model Data Model Classification: File Based or primitive models, traditional data Models, Semantic Data Models	
4th WEEK	17 Aug to 21 Aug	7	Relational model Concepts: Domain, Tuple, Attribute, Cardinality, Relation	Revision of exercise on inserting and deleting values from tables
		8	Relationship among entities , database design with ER model	
5th WEEK	24 Aug to 28 Aug	9	Relational model Concepts: Domain, Tuple, Attribute, Cardinality, Relation	Exercise on Querying the table using Select Command
		10	Keys- Primary, Secondary, Foreign, Alternate. Relational Constraints and Relational Database schemes Domain Constraints, key Constraints and Constraints on Null	
		11	Relational Databases and Relational Database Schemes	

6th WEEK	31 Aug to 04 Sept	12	Entity Integrity, Referential Integrity and Foreign Key Comparison between ER Model and Relational Model	Revision of Exercise on Querying the table using Select Command
7th WEEK	07 Sep to 11 Sep	13	Trivial and Non Trivial Dependencies	Exercise on using various types of joins
		14	Non Trivial Dependencies	
8th WEEK	14 Sep to 18 Sep	15	Revision	Revision
		16	Sessional -1	
9th WEEK	21 Sep to 25 Sep	17	Non Loss Decomposition and Functional Dependencies First and 2 nd normal forms	Revision of Exercise on using various types of joins
		18	Third normal form, BCNF, Denormalization	
10th WEEK	28 Sep to 02 Oct	19	Creating and using indexes, Creating and using views	Exercise on using functions provided by database package
		20	Database security, Process controls Database protection, grant and Revoke	
11th WEEK	05 Oct to 09 Oct	21	DDL: Creating tables, Creating a table with data from another table	Revision of Exercise on using functions provided by database package
		22	Inserting values into a table, Updating columns of a table Deleting Rows, Dropping a table	
12th WEEK	12 Oct to 16 Oct	23	Revision	Revision
		24	Sessional -2	
13th WEEK	19 Oct to 23 Oct	25	DML, Database Security and privileges, Grant and Revoke command	Exercise on Grant, Revoke, Commit and Rollback
		26	Maintaining Database objects, commit and Rollback Various types of select commands	
14th WEEK	26 Oct to 30 Oct	27	Various types of joins, subquery	Revision of Exercise on Grant, Revoke, Commit and Rollback
		28	Aggregate functions , Challenges of My SQL	
15th WEEK	02 Nov to 06 Nov	29	Revision	Design of Database for any application
		30	Introduction to Big Data	
16th WEEK	09 Nov to 13 Nov	31	Understanding Big data with samples	Revision
		32	Understanding Big data with samples	
17th WEEK	16 Nov to 20 Nov	33	Revision	Revision
		34	Sessional -3	

LESSON PLAN

Name of Faculty

Neha Sharma

Semester

3rd B

Subject

Digital Electronics

Lesson Plan duration

30/7/26 to 23/11 /26

Work Load per week

3 T + 4 P

WEEK	DATE	LECTURE DAY	THEORY	PRACTICAL
			TOPIC	TOPIC
IST WEEK	30-07-2026 To 31/7/26	1	Introduction to syllabus	
2ND WEEK	03 Aug to 07 Aug	2	Introduction to analog and digital signal	Verification and interpretation of truth tables for AND, OR, NOT Gate
		3	Number system-Binary, Octal, Hexadecimal	
		4	Conversion from decimal and hexadecimal to binary and vice-versa.	
		5	Binary addition and subtraction including binary points. 1's and 2's complement method of addition/subtraction	
3rd WEEK	10 Aug to 14 Aug	6	Concept of code, weighted and non weighted codes, examples of 8421, BCD, excess 3 and Gray code	Verification and interpretation of truth tables for NAND, NOR Gate
		7	Concept of parity, single and double parity	
		8	Error detection	
4th WEEK	17 Aug to 21 Aug	9	Revision of Unit 1	Verification and interpretation of truth tables for EXOR, EXNOR gate
		10	Revision of Unit 1	
		11	Concept of negative & positive logic	
5th WEEK	24 Aug to 28 Aug	12	Definition, symbols and truth tables of NOT, AND, OR Gates	Realization of logic functions with the help of NAND and NOR gates
		13	NAND, NOR, EXOR AND EXNOR GATE	
		14	NAND & NOR as universal gate	
6th WEEK	31 Aug to 04 sept	15	Introduction to TTL and CMOS logic families	To design a half adder using XOR and NAND gates and verification of its operation
		16	Postulates of Boolean algebra, De Morgan's theorems.	
		17	Implementation of Boolean Karnaugh map	
7th WEEK	07 Sep to 11 Sep	18	Implementation of Boolean Karnaugh map	To design a full adder using XOR and NAND gates and verification of its operation
		19	Application in developing combinational logic circuits	
		20	Revision of Unit 2	
8th WEEK	14 Sep to 18 Sep	21	Revision of Unit 2	To design circuit for 7 Segment display Ics
		22	SESSIONAL-1	
		23	Design & Implementation of Half adder and full adder	
9th WEEK	21 Sep to 25 Sep	24	4 bit adder circuit	Verification of truth table for positive edge triggered, negative edge triggered, level triggered IC flip-flops
		25	Basic functions and block diagram of MUX and DEMUX with different Ics	

10th WEEK	28 Sep to 02 Oct	26	Basic functions and block diagram of Encoder	Verification of truth table for encoder and decoder ICs.
		27	4 bit decoder circuit for 7 segment display and decoder ICs.	
		28	Latches and flip flops: Concept and types of latch with their working and applications	
11th WEEK	05 Oct to 09 Oct	29	Operation using waveforms and truth tables of RS, JK and Master/Slave JK flip flops.	Verification of truth table for Multiplexers and x and De-Multiplexers
		30	Operation using waveforms and truth tables of T and D flip flop.	
		31	Difference between a latch and a flip flop	
12th WEEK	12 Oct to 16 Oct	32	Revision	To design a 4 bit SISO, SIPO, PISO, PIPO shift registers using JK/D flip flops and
		33	Revision	
		34	SESSIONAL-2	
13th WEEK	19 Oct to 23 Oct	35	Introduction to counters : Synchronous and Asynchronous	To design a 4 bit ring counter and verify its operation.
		36	Binary counters, Divide by N ripple counters, Decade counter, Ring counter	
		37	Shift Register: Introduction and basic concepts including shift left and shift right.	
14th WEEK	26 Oct to 30 Oct	38	Introduction to registers: SISO, SIPO	Use of Asynchronous Counter ICs (7490 or 7493)
		39	Introduction to registers: PISO, PIPO	
		40	Universal shift register	
15th WEEK	02 Nov to 06 Nov	41	A/D and D/A Converters: Working principle of A/D and D/A converters, Stair step Ramp A/D converter, Dual Slope A/D converter.	To design and verification of A/D converter
		42	Successive Approximation A/D converter	
		43	Binary Weighted D/A, R/2R ladder D/A converter	
16th WEEK	09 Nov to 14 Nov	44	Applications of A/D and D/A converter	To design and verification of D/A converter and 74181 ALU IC.
		45	Memory organization, classification of Semiconductor memories (RAM, ROM, PROM, EPROM, EEPROM)	
		46	Static & Dynamic RAM, 74181 ALU IC	
17th WEEK	16 Nov to 20 Nov	47	Revision	Viva
		48	Revision	
		49	SESSIONAL-3	
18th WEEK	23-Nov-26	50	Revision	

LESSON PLAN

Name of Faculty PINKI DEVI/YUDHVIR SHARMA
Semester IIIrd
Subject Programming in C
Lesson Plan duration 30/7/26 to 23/11 /26
Work Load per week

		THEORY		PRACTICAL
WEEK	DATE	RE DAY	TOPIC	TOPIC
IST WEEK	30-07-2026 To 31/7/26	1	Algorithm and Programming Development: Introduction, Steps in development of a program	P.E.on executing and editing a C program
2ND WEEK	03 Aug to 07 Aug	2	Flow charts, Algorithm development	
		3	Algorithm and Flowchart writing for practical	P.E. on executing and editing a C program
		4	Programme Debugging, Practice of error detection and corrections in examples.	P.E. on defining variables and assigning values to variables
3rd WEEK	10 Aug to 14 Aug	5	Program Structure: Introduction to structure of C program	
		6	Keywords, assign statements	P.E. on defining variables and assigning values to variables
		7	I/O statements: Printf and Scanf,	P.E. on arithmetic and relational operators
4th WEEK	17 Aug to 21 Aug	8	Constants, variables and data types	
		9	Operators and Expressions	P.E. on arithmetic and relational operators
		10	Unformatted and Formatted IOS	P.E. on arithmetic Expressions and their evaluation
5th WEEK	24 Aug to 28 Aug	11	Data Type Casting	
		12	Class Test	P.E. on arithmetic expressions and their evaluation
		13	Control Structures: Introduction and use	P.E. onformatting input/output using printf and scanf and their return type values
6th WEEK	31 Aug to 04 Aug	14	Decision making with IF – statement	
		15	IF – Else and Nested IF	P.E. onformatting input/output using printf and scanf and their return type values
		16	While and do-while, for loop	P.E. using if, if-else statement
7th WEEK	07 Sep to 11 Sep	17	Break. Continue statements	
		18	Go to and switch statements	P.E. using if, if-else statement
		19	Revision of unit III	P.E. on switch statement
8th WEEK	14 Sep to 18 Sep	20	Sessional Test I	
		21	Pointers: Introduction to pointers	P.E. on switch statement
		22	Signed and unsigned short and long integer variable concepts	P.E. on do – while statement
9th WEEK	21 Sep to 25 Sep	23	Address operator and pointers, Declaring and initializing pointers	
		24	Single pointer	P.E. on do – while statement
		25	Revision of unit IV	P.E. on for loop statement
10th WEEK	28 Sep to 02 Oct	26	Introduction to functions	
		27	Global and local variables	P.E. on for loop statement
		28	Function Declaration	Simple programs using pointers
11th WEEK	05 Oct to 09 Oct	29	Standard functions	
		30	Parameters and Parameter Passing	Simple programs using pointers
		31	Call - by value/reference	Programs on one-dimensional array
12th WEEK		32	Sessional II	
		33	Arrays and Strings: Introduction to Arrays, Array Declaration, Length of	Programs on one-dimensional array.

	05 Oct to 09 Oct	34	Single and Multidimensional Array, Arrays of characters	Programs on two-dimensional array.
13th WEEK	05 Oct to 09 Oct	35	Introduction of Strings: String declaration and definition, String	
		36	Passing an array to function	Programs on two-dimensional array.
		37	Pointers to an array and strings	Programs for putting two strings together and comparing two strings
		38	Structures and Unions: Introduction	
14th WEEK	05 Oct to 09 Oct	39	Declaration of structures	Programs for putting two strings together and
		40	Accessing structure members	Simple programs using functions
		41	Structure Initialization	
15th WEEK	02 Nov to 06 Nov	42	Pointer to structures	Simple programs using functions
		43	Introduction, Difference between Structures and unions	programs using structures and union
		44	Concept of File Handling	
16th WEEK	02 Nov to 06 Nov	45	Opening and Closing of File	programs using structures and union
		46	Modes of Accessing Files	Program on Reading and Writing data to a file.
		47	Reading and Writing in the File	Program on Reading and Writing data to a file.
17th WEEK	02 Nov to 06 Nov	48	Sessional III	Revision
		49	Revision	Revision

Operating Systems -Lesson Plan

Name of faculty. : Archana Panwar / Poonam Jain

Discipline : Computer Engineering

Semester : 5th

Subject : Operating System

Lesson Plan Duration : 18 Weeks (from July 30, 2026 to Nov23, 2026)

Work Load (Lecture/ Practical) per week (in hours): Lectures-03, Practical – 04

Week	Theory (Wording from Syllabus)	Practical	Practical Statement
1	Unit I – Overview of Operating Systems Definition of Operating Systems, Types of Operating Systems, Operating System Services	Practical 1	Demonstration of all the controls provided in windows control panel.
2	User operating system interface, System Calls, Types of System Calls	Practical 2	Exercise on Basics of windows.
3	System Programs, Operating System Structure, Virtual Machine, Benefits of Virtual Machine	Practical 3	Installation of Linux Operating System.
4	Unit II – Process Management and Deadlocks Process concept, Process State, Process Control Block, Scheduling Queues	Practical 4	Usage of directory management commands of Linux: ls, cd, pwd, mkdir, rmdir.
5	Scheduler, Job Scheduler, Process Scheduler, Context Switch, Operations	Practical 5	Usage of File Management commands of Linux: cat, chmod, cp, mv,

	on Processes		rm, pg, more, find.
6	Interprocess Communication, Shared Memory Systems, Message-Passing Systems, CPU Scheduler	Practical 6	Use the general purpose commands of Linux: wc, od, lp, cal, date, who, whoami.
7	Scheduling Criteria, Scheduling Algorithms, Preemptive and Non Preemptive, First come first serve, Shortest Job first	Practical 7	Using the simple filters: pr, head, tail, cut, paste, nl, sort.
8	Round Robin, Multiprocessor scheduling, Process Synchronization, Deadlock, Conditions for Dead lock, Methods for handling deadlocks, Dead Prevention, Deadlock Avoidance, Deadlock detection, Recovery from deadlock	Practical 8	Communication Commands: news, write, talk, mseg, mail, wall.
9	Unit III – Memory Management Function Definition Logical and Physical address Space, Swapping, Memory allocation, Contiguous Memory allocation, Fixed and variable partition	Practical 9	Write a shell program that finds the factorial of a number.
10	Internal and External fragmentation and Compaction, Paging – Principle of operation, Page allocation,	Practical 10	Write a shell program that finds whether a given number is prime or not.

	Hardware support for paging, Protection and sharing, Disadvantages of paging		
11	Segmentation, Virtual Memory.	Practical 11	Write a shell program to find the average of three numbers.
12	Unit IV – I/O Management Functions and File Management Dedicated device, shared device, I/O device , storage device, buffering and spooling Types of File System, Simple file system, Basic file system, Logical file system, Physical file system, Various Methods of Allocating Disk Space	Practical 12	Write a shell program that will convert all the text of the file from lowercase to uppercase.
13	Unit V – Linux Operating System History of Linux and Unix, Linux Overview, Structure of Linux, Linux releases, Open Linux, Linux System Requirements	-	Revision
14	Linux Commands and Filters: mkdir, cd, rmdir, pwd, ls, who, whoami, date, cat, chmod, cp, mv, rm, pg, more, pr, tail, head, cut, paste, nl,	-	Revision

	grep, wc, sort, kill		
15	write, talk, mseg, wall, merge, mail, news, Shell: concepts of command options, input, output, redirection	-	Practice
16	pipes, redirecting and piping with standard errors, Shell scripts, vi editing commands	-	Revision and Internal Assessment
17	Revision, Question Practice, Doubt Clearing and End Semester Examination Preparation	-	Course Review and Practical Record Completion
18	Final Revision	-	Practical Viva, Record Submission and Course Completion

		LESSON PLAN		
Name of Faculty		Pinki Devi/Ria		
Semester		5th Sem		
Subject		Web Technologies		
Lesson Plan duration		30/7/26 to 23/11 /26		
Work Load per week		3 T + 4P		
		THEORY		PRACTICAL
WEEK	DATE	LECTURE DAY	TOPIC	TOPIC
Ist WEEK	30-07-2026	1		
2nd WEEK	03 Aug to 07 Aug	2	Introduction to HTML 5 and CSS 3. Basic structure of HTML	Design web pages using correct , CSS, and XHTML syntax, structure
		3	designing a web page, inserting links images, horizontal rules, comments	
		4	Formatting text, title, headings, colors, fonts, sizes	
3rd WEEK	10 Aug to 14 Aug	5	simple tables and forms.	Design web pages using correct , CSS, and XHTML syntax, structure
		6	HTML tags, hyperlinks. Adding graphics and images	
		7	image maps,image files. Using tables,forms, style sheets andframes. Floating of web site/pages.	
4th WEEK	17 Aug to 21 Aug	8	Introduction to PHP: How PHP Works	correct PHP, CSS, and XHTML syntax, structure.
		9	The php.ini File, Basic,PHP Syntax,	
		10	PHP variables	
5th WEEK	24 Aug to 28 Aug	11	statements, operators,	correct PHP, CSS, and XHTML syntax, structure.
		12	decision making, loops	
		13	arrays, strings	
6th WEEK	31 Aug to 04 Aug	14	forms, get and post methods, functions.	web pages using correct PHP, CSS, and XHTML syntax, structure.
		15	Introduction to cookies, storage of cookies at client side, Using information of cookies.	
		16	Creating single or multiple server side sessions.	
7th WEEK	07 Sep to 11	17	Timeout in sessions, Event management in PHP.	web pages using correct PHP, CSS, and XHTML
		18	Introduction to content management systems based on PHP.	

	Sep	19	Revision	syntax, structure.
8th WEEK	14 Sep to 18 Sep	20	Revision	Revision
		21	Revision	
		22	SESSIONAL-1	
		23	Introduction to MySQL,connecting to MySQL, database,	
9th WEEK	21 Sep to 25 Sep	24	creation, insertion, deletion	to access and manipulate databases.
		25	Introduction to MySQL,connecting to MySQL, database,	
		26	creation, insertion, deletion	
10th WEEK	28 Sep to 02 Oct	27	retrieval of MySQL data using PHP.	to access and manipulate databases.
		28	Installing Wamp Server -Installing Joomla on Web Server	
		29	Joomla global configuration -Article manager	
11th WEEK	05 Oct to 09 Oct	30	Archive manager-FrontPage manager	Install and configure both PHP and MySQL
		31	Revision	
		32	Revision	
12th WEEK	12 Oct to 16 Oct	33	Revision	Revision
		34	SESSIONAL-2	
		35	Section manager - Category manager- Media Manager-Menu manager - Component manager	
13th WEEK	19 Oct to 23 Oct	36	ContentManager-Extensions manager-	Install and configure both PHP and MySQL
		37	Plugin manager-Template manager-How to install a new module-	
		38	How to install a new template-How to install a new	
14th WEEK	26 Oct to 30 Oct	39	Changing the layout structure by c hanging the module position.	Install and configure both PHP and MySQL
		40	Understanding Basic Joomla Template-Customizing Joomla template -BuildingCustom Joomla Template-Understanding Templatedetails.xml	
		41	File-Creating Templatedetails.xml,File-Creating	
15th WEEK	02 Nov to 06	42	Linking JavaScript-Understanding.Include-Displaying	configure both

	Nov	43	Creating Custom Forms-	PHP and MySQL
16th WEEK	09 Nov to 14 Nov	44	Changing the Form Appearance using CSS.	Revision
		45	Revision	
		46	Revision	
17th WEEK	16 Nov to 20 Nov	47	Revision	Revision
		48	Revision	
		49	SESSIONAL-3	
18th WEEK	23-Nov-26	50	Revision	Revision

LESSON PLAN

Name of Faculty

Neha Sharma/Renu Kandra

Semester

5th B

Subject

Computer Networks

Lesson Plan duration

30/7/26 to 23/11 /26

Work Load per week

3 T + 4 P

WEEK	DATE	LECTURE	THEORY	PRACTICAL
			TOPIC	TOPIC
IST WEEK	30-07-2026 To 31/7/26	1	Introduction to syllabus	
2ND WEEK	03 Aug to 07 Aug	2	Introduction to Computer Network	Recognize the physical topology and cabling (coaxial, OFC, UTP, STP) of a network
		3	Concept of Network, Models of network computing	
		4	Networking models, peer to peer, client server, LAN, MAN, WAN	
3rd WEEK	10 Aug to 14 Aug	5	Network services	Recognize the physical topology and cabling (coaxial, OFC, UTP, STP) of a network
		6	Network Topologies	
		7	Switching Techniques	
4th WEEK	17 Aug to 21 Aug	8	OSI model: Definition, Layered architecture	Recognition and use of various types of connectors RJ-45, RJ-11, BNC and
		9	Function of various layers	
		10	Function of various layers	
5th WEEK	24 Aug to 28 Aug	11	TCP/IP Model: definition, functions of various layers	Making of cross cable and straight cable
		12	Comparison between OSI and TCP/IP model	
		13	Concept of physical and logical addressing	
6th WEEK	31 Aug to 04 sept	14	IPV4 addresses – Address space, Notations	Install and configure a network interface card in a workstation.
		15	Classful Addressing, Different IP address classes, Classes & Blocks,	
		16	Classless Addressing – Address blocks, Masks	
7th WEEK	07 Sep to 11 Sep	17	Special IP Addresses, Subnetting and Supernetting	Identify the IP address of a workstation and the class of the address and configure the IP Address on a workstation
		18	Loop back concept, Network Address Translation, IPV4 Header	
		19	IPV6 Header, Comparison between IPV4 and IPV6	
8th WEEK	14 Sep to 18 Sep	20	Revision of Unit 1	Seminar/Viva
		21	Revision of Unit 1	
		22	SESSIONAL-1	
9th WEEK	21 Sep to 25 Sep	23	Ethernet specification and standardization: 10 Mbps (Traditional Ethernet)	Managing user accounts in windows.
		24	10 Mbps(Fast Ethernet) and 1000 Mbps (Gigabit Ethernet)	
		25	Network connectivity Devices	

10th WEEK	28 Sep to 02 Oct	26	NICs Hubs, Switches, Routers	Sharing of Hardware resources in the network.
		27	Repeaters, Modem, Gateway	
		28	Configuration of Routers & Switches	
11th WEEK	05 Oct to 09 Oct	29	Network Security Principles	Connectivity troubleshooting using PING,
		30	Cryptography, using secure protocols	
		31	Cryptography, using secure protocols	
12th WEEK	12 Oct to 16 Oct	32	Revision	Seminar/Viva
		33	Revision	
		34	SESSIONAL-2	
13th WEEK	19 Oct to 23 Oct	35	Trouble Shooting Tools: PING, IPCONFIG, IFCONFIG	Use of Netstat and its options.
		36	NETSTAT, TRACEROUT, Wireshark, Nmap	
		37	TCPDUMP, ROUTEPRINT, DHCP Server	
14th WEEK	26 Oct to 30 Oct	38	Workgroup/Domain Networking	Connectivity troubleshooting using IPCONFIG, IFCONFIG
		39	Introduction to wireless LAN IEEE 802.11, WiMax and Li-Fi	
		40	Wireless Security	
15th WEEK	02 Nov to 06 Nov	41	Introduction to bluetooth - architecture, application	Installation of Network Operating System (NOS)
		42	Comparison between bluetooth and Wi -fi	
		43	Definition of Cloud Computing and advantages of Cloud Computing	
16th WEEK	09 Nov to 14 Nov	44	Cloud Computing service model- SaaS, PaaS, IaaS	Demonstration of Cloud Computing in Labs or using Online Videos.
		45	Deployment model- Private, Public Cloud	
		46	Hybrid cloud, Community cloud	
17th WEEK	16 Nov to 20 Nov	47	Revision	Seminar/Viva
		48	Revision	
		49	SESSIONAL-3	
18th WEEK	23-Nov-26	50	Revision	

Lesson Plan

Name of faculty : **Neeraj Malan**
Discipline : Computer Engineering
Semester : 5th
Subject : **Cloud Computing**
Lesson Plan Duration : 18 Weeks (from July 30, 2026 to Nov23, 2026)
Work Load (Lecture/ Practical) per week (in hours): Lectures-02, Practical – 02

Week	Date	Theory		Practical	
		Lecture day	Topic (including assignment / test)	Practical day	Topic
1st	30-07-2026 to 31-07-2026	1st	Introduction to syllabus	1	Introduction to Cloud Vendors: Amazon, Microsoft, IBM.
2 nd	03-08-2026 to 07-08-2026	2nd	Introduction to cloud Computing	2	
		3rd	Evolution of Cloud Computing		
3rd	10-08-2026 to 14-08-2026	4 th	Cloud Computing Overview, Characteristics	3	
		5 th	Applications, Benefits, Challenges		
4 th	17-08-2026 to 21-08-2026	6 th	Major Cloud Vendors/Service Provider in the world.	4	
		7 th	Service and Deployment Models, Cloud Computing Service Models: Infrastructure as a Service		
5 th	24-08-2026 to 28-08-2026	8 th	Platform as a Service, Software as a Service; Cloud Computing Deployment Models: Private Cloud; Public Cloud	5	
		9 th	Community Cloud, Hybrid Cloud, Major Cloud Service providers		
6 th	31-08-2026 to 04-09-2026	10 th	Service Level Agreement (SLA) Management Overview of SLA,	6	Introduction to OwnCloud and its features.
		11 th	Types of SLA		
7 th	07-09-2026 to 11-09-2026	12 th	SLA Life Cycle	7	
		13 th	SLA Management Process		
8 th	14-09-2026 to 18-09-2026	14 th	Revision	8	
		15 th	Sessional test		

9 th	21-09-2026 to 25-09-2026	16 th	Sessional discuss,	9	Installation and configuration of OwnCloud software for SaaS
		17 th	Virtualization Concepts		
10 th	28-09-2026 to 02-10-2026	18 th	Overview of Virtualization, Benefits of Virtualization	10	
		19 th	Overview of Virtualization, Benefits of Virtualization		
11 th	05-10-2026 to 09-10-2026	20 th	Types of Virtualization	11	
		21 st	Hypervisors and its types.		
12 th	12-10-2026 to 16-10-2026	22 nd	Revision Unit-3,4	12	
		23 rd	Sessional test		
13 th	19-10-2026 to 23-10-2026	24 th	cloud storage &security	13	Setting up Virtualization using Virtualbox/VMWa re Hypervisor
		25 th	Storage as a Service, Benefits and Challenges		
14 th	26-10-2026 to 30-10-2026	26 th	Storage Area Networks (SANs), Infrastructure Security	14	
		27 th	Network Level Security		
15 th	02-11-2026 to 06-11-2026	28 th	Data Security & Privacy Issues,	15	
		29 th	Data Security & Privacy Issues,		
16 th	09-11-2026 to 13-11-2026	30 th	Legal Issues in Cloud Computing	16	Installing Open Source Cloud simulation software Cloud Sim
		31 st	Legal Issues in Cloud Computing.		
17 th	16-11-2026 to 20-11-2026	32 nd	Revision	17	
		33 rd	Sessional Test		
18 th	23-11-2026	34 th	Revision, Sessional Test discuss	18	

Kalpana Chawla Government Polytechnic For Women , Ambala City

Lesson plan (Odd Semester)

Name of Faculty

Uma Kant

Discipline

Computer Engg.

Semester

V

Subject

Cloud Computing

Work Load (Per Week)

Lecture-2, Practical-2

30 July-2026 to 23 Nov-2026 (15 weeks)

Week	Theory		Practical	
	Lecture Day	Topic	Practical day	Topic
1st	1st	Unit 1-- Introduction Evolution of Cloud Computing	1st	Introduction to Cloud Vendors: Amazon, Microsoft, IBM
	2nd	Cloud Computing Overview, Characteristics		
	3rd	Applications, Benefits		
2nd	4th	Challenges of Cloud Computing	2nd	Revision
	5th	Revision		
	6th	Unit2-- Service and Deployment Models		
3rd	7th	Cloud Computing Service Models: Infrastructure as a Service	3rd	Setting up Virtualization using Virtual box/VMware Hypervisor
	8th	Platform as a Service, Software as a Service		
	9th	Cloud Computing Deployment Models, Private Cloud		
4th	10th	Public Cloud, Community Cloud, Hybrid Cloud	4th	Revision and File Check
	11th	Major Cloud Service providers		
	12th	Assignment & Revision		
5th	13th	Unit 3--Service Level Agreement (SLA) Management Overview	5th	Introduction to Own Cloud
	14th	Types of SLA, SLA Life Cycle		
	15th	SLA Management Process.		
6th	16th	Class test	6th	File Checking and Revision
	17th	Unit 4-- Virtualization Concepts Overview		
	18th	Types of Virtualization		
7th	19th	Types of Virtualization	7th	Installation and configuration of Own Cloud software for SaaS
	20th	Benefits of Virtualization		
	21st	Hypervisors		
8th	22nd	Revision	8th	Viva/ Class Test
	23rd	Assignment		
	24th	Unit 5-- Cloud Security- Introduction		
9th	25th	Infrastructure Security	9th	Accessing Microsoft AZURE cloud-services
	26th	Data Security & Privacy Issues		
	27th	Data Security & Privacy Issues		

10th	28th	Legal Issues in Cloud Computing.	10th	File Checking and Revision
	29th	Class Test		
	30rd	Unit 6-- Cloud Storage Overview		
11th	31st	Storage as a Service	11th	File Checking and Revision
	32nd	Benefits and Challenges		
	33rd	Storage Area Networks (SANs).		
12th	34th	Revision	12th	Cloud Simulation Software Introduction: Cloud Sim.
	35th	Unit7-- Scheduling in Cloud		
	36th	Overview of Scheduling problem		
13th	37th	Different types of scheduling	13th	Revision
	38th	Scheduling for independent and dependent tasks		
	39th	Scheduling for independent and dependent tasks		
14th	40th	Static vs. Dynamic scheduling	14th	File Checking
	41st	Revision		
	42nd	Assignment		
15th	43rd	Revision	15th	Viva
	44th	Class test		
	45th	Revision		