

Sr. No.	Date	Name of chapter	Contents to be taught	Remark
1	10-08-23	Overview of Operating Systems	Objectives and Functions of Operating Systems,	
2	14/08/23		Operating Systems Evolution - Batch Processing Systems	
3	16/08/23		Multiprogramming Systems,	
4	19/08/23		Multiprocessing Systems	
5	21/08/23		Time Sharing Systems,	
6	22/08/2023		Personal Computer Operating Systems	
7	23/08/2023		Handheld Computer Systems,	
8	26/08/2023		Real Time Systems	
9	28/08/2023		,Distributed SystemsOperating	
10	29/08/2023		System Architecture - Monolithic vs MicrokernelProcess,	
11	30/08/2023	Processes and Threads	Process States	
12	02-09-23		Process Life Cycle,	
13	04-09-23		Process Control Block (PCB)	
14	05-09-23		Threads, Multithreading	
15	06-09-23		Inter-process Communication,	
16	11-09-23		Process Synchronization,	
17	12-09-23		Race Condition, Critical Section Problem and its Solutions	
18	13/9/2023		Deadlocks - Characterization, Necessary Conditions	
19	16/9/2023		Deadlock Avoidance, Prevention and Recovery	
20	18/9/2023	CPU Scheduling	CPU Scheduler,	
21	19/9/2023		Preemptive and Non-preemptive Scheduling	
22	20/9/2023		Scheduling Criteria - CPU Utilization,	
23	23/9/2023		Throughput,Turnaround Time	
24	25/9/2023		Waiting Time, Response Time	
25	26/9/2023		CT-1	
26	27/9/2023		Scheduling Algorithms- First Come First Serve	
27	30/9/2023		Shortest Job First,	
28	03-10-23		Shortest Remaining Time First	
29	04-10-23		Priority Scheduling,	
30	07-10-23		Round-Robin	
31	09-10-23		Multiprocessor Scheduling	
32	10-10-23	Memory Management	Memory Hierarchy, Address Space, Address Translation	
33	11-10-23		Memory ProtectionSwapping	
34	16/10/2023		Contiguous Memory Allocation	
35	17/10/2023		Fixed Partition and Variable Partition Schemes	
36	18/10/2023		Memory Allocation Strategies, Fragmentation,	
37	21/10/2023		CompactionDemand Paging,	
38	23/10/2023		Thrashing, Page Replacement Policies	
39	25/10/2023		CT-2	
40	30/10/2023	Storage Management	Storage Devices - Magnetic Tapes, Magnetic Disks	
41	31/10/2023		Optical Disks, Flash Storage	
42	01-11-23		Sequential andDirect Access	
	04-11-23		Disk Scheduling - SCAN CSCAN	
	06-11-23		House Test	
	07-11-23			
	08-11-23			
	18/11/2023	Linux Operating System	Features of Linux OS	
	20/11/2023		GNU Project	
	21/11/2023		Linux Architecture - Kernel	
	22/11/2023		System Calls Interface	
	25/11/2023		System Libraries	

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1	10-08-23	Internet and World Wide Web	Brief History of the Internet	
2	21/08/23		Structure of the Internet	
3	24/08/23		Internet Services and Applications	
4	26/08/23		Different Ways to Connect to the Internet	
5	28/08/23		Common Internet Connection Issues and their Solutions	
6	31/08/23		World Wide Web, HTTP	
7	02-09-23		Familiarization with the Key Terms - Network Protocol Web Server, Web Browser	
8	04-09-23		Website, Web Application Hypertext, Hyperlink, Search Engine	
9	11-09-23		Proxy Server, URL, DNS	
10	14/09/23	HTML 5	HTML, HTML Coding Conventions	
11	16/09/23		HTML Tag, Structure of HTML Element Global Attributes - id, class, style, title, tabindex	
12	18/09/23		Structure of a Web Page - <html>, <head>, <body>, <!DOCTYPE>, <title> and <meta> Elements	
13	21/09/23		CT-1	
14	23/09/23	HTML Basic Elements	Headings - <h1> ... <h6>; Paragraphs - <p>	
15	25/09/23		Special Text Elements - <pre>, <code>, <q>, <var>	
16	28/09/23		Lists : Ordered Lists (), Unordered Lists ()	
17	30/09/23		HTML Comments, Document Object Model (DOM)	
18	05-10-23		Attributes of List Elements: type, start; Nested Lists, Line Break () and Horizontal Rule (<hr>)	
19	07-10-23		Text Formatting Elements - , , , <i>, <mark>, <u>, <sub>, <sup>;	
20	09-10-23		Tables - <table>, <thead>, <tbody>, <tfoot>, <tr>, <th>, <td>, <colgroup>, <col>;	
21	12-10-23		Table Attributes - cellpadding, cellspacing, border, rowspan, colspan;	
22	16/10/23	HTML Layout Elements	Block and Inline Elements	
23	19/10/23		Creating Sections - <div>, ; Identifying Elements - id, class and name attributes; Frames - <iframe>;	
24	21/10/23		CT-2	
25	26/10/23		HTML5 Semantic Elements - <main>, <header>, <footer>, <article>, <section>, <nav>, <aside>, <details>, <summary>, <time>, <figure>	
26	30/10/23		Images - ; Image Attributes - src, alt; Hyperlink - <a>; Hyperlink Attributes - href, target	
27	02-11-23		CSS Types - Inline, Internal, External; <style> and <link> elements	
28	04-11-23		CSS Rule, Selector and Declaration; CSS Length Units; CSS Box Model; Setting Margins, Borders and Padding of Elements	
29	06-11-23			
30	07-11-23			
31	08-11-23			
32	09-11-23			
33	16/11/23		CSS Colors - Color Names, RGB and HEX Formats; Setting Colors of Text, Background and Border	
34	18/11/23		Styling Text - font-family, font-size, font-style, font-weight, font-transform, font-decoration, text-align.	
35	20/11/23		CSS Layout - position and float; Flexbox and Grid layouts; Styling Tables and Lists; Basic Animation using CSS, CSS Pseudo Elements and Pseudo Classes	
36	23/11/23	Javascript	Role of Javascript in a Web Page, Embedding Javascript Code in Web Page	
37	25/11/23		Javascript Variables - Naming, Scope and Lifetime, Hoisting	
38	30/11/23		; Javascript Operators, Control Statements; Javascript Arrays; Linking External Javascript File;	
39	02-12-23		Accessing and Manipulating HTML DOM Elements with Javascript	
40	04-12-23		JavaScript, Builtin Javascript Functions, User-defined Functions	

Sr. No.	Date	Name of chapter	Contents to be taught	Remark
1	10-08-23	Introduction to Programming	Program Design Tools - Algorithm, Flowchart	
2	14/08/23		Pseudocode; Evolution of Programming Languages,	
3	16/08/23		Linker, Source Code, Libraries,	
4	19/08/23		Syntax and Semantic Errors, Bugs.	
5	21/08/23	Introduction to C Language	Brief History of C Language, Features of C Language,	
6	22/08/2023		Character Set, Identifier	
7	23/08/2023		Keywords, Literals,	
8	26/08/2023		Variables, Constants	
9	28/08/2023		Structure of a 'C' Program, Comments	
10	29/08/2023		Preprocessor Directives, Data Types,	
11	30/08/2023		Type Casting,	
12	02-09-23		Storage Classes	
13	04-09-23	Input/ Output	Standard Input, Standard Output	
14	05-09-23		Standard Error	
15	06-09-23		I/O Redirection	
16	11-09-23		Unformatted I/O Functions -getchar(), putchar(), gets(), puts();	
17	12-09-23		Formatted I/O Functions - printf(), scanf()	
18	13/9/2023		Format Specifier	
19	16/9/2023	Operators	Arithmetic Operators,	
20	18/9/2023		Relational Operators	
21	19/9/2023		Logical Operators, Bitwise Operators,	
22	20/9/2023		Assignment Operators	
23	23/9/2023		CT-1	
24	25/9/2023		Conditional Operator Special Operators	
25	26/9/2023		Expressions, Associativity and Order of Precedence of Operators	
26	27/9/2023	Flow Control Statements	Selection Statements: if	
27	30/9/2023		if...else	
28	03-10-23		Nested if, if...else if Ladder	
29	04-10-23		switch...case	
30	07-10-23		Loops - while	
31	09-10-23		do...while	
32	10-10-23		for	
33	11-10-23		Jump Statements - goto	
34	16/10/2023		break, continue,return;	
35	17/10/2023		Nested Loops	
36	18/10/2023		Infinite Loops	
37	21/10/2023	Arrays, Structures, Unions and Pointers	Array, Memory Representation	
38	23/10/2023		One-Dimensional Array Two-Dimensional Arrays Declaration and Initialization	
39	25/10/2023		CT-2	
40	30/10/2023		Enumeration, Strings, String Constants,	
41	31/10/2023		Escape Sequences, Standard String Functions - strlen(), strcmp(), strcpy(), strcat();	
42	01-11-23		Structures, Unions,	
43	04-11-23		Pointer -Declaration, Initialization, Assignment;	
44	06-11-23			
45	07-11-23		HOUSE TEST	
46	08-11-23			
47	18/11/2023		Dynamic Memory Allocation: malloc()	
48	20/11/2023		calloc(), free()	
49	21/11/2023	Functions	Definition of Function, Function Prototype	
50	22/11/2023		Formal and Actual Parameters	
51	25/11/2023		Function Call	
52	28/11/2023		Call by Value	
53	29/11/2023		Call by Reference	
54	02-12-23		Arrays as Function Arguments	
55	04-12-23		Recursion	

Sr. No.	Date	Name of chapter	Contents to be taught	Remark
1	11-08-23	Introduction	Functional units of Digital Computer, Computer Organization	
2	16/08/23		Computer Design, Computer Architecture	
3	18/08/23		Von-Neumann and Harvard architecture,	
4	19/08/23		Bus Interconnection, Evolution of Microprocessors	
5	23/08/23		Concept of Microcomputer, Microcontroller and Embedded Systems	
6	25/08/23	Overview of Digital Electronics	Number systems: Decimal, Binary, Octal and Hexadecimal.	
7	26/08/23		Conversion from one number system to other number System	
8	01-09-23		Signed Binary Numbers , Sign Magnitude Representation	
9	02-09-23		One's Compliment Representation and Two's Compliment Representation	
10	06-09-23		Binary Arithmetic: Addition, Subtraction	
11	08-09-23		Binary Arithmetic using one's and Two's Compliment.	
12	13/9/2023		Fixed and Floating points numbers	
13	15/9/2023		Computer Codes: BCD, EBCDIC ASCII	
14	16/9/2023		Multiplication Algorithms - Hardware Implementation for Signed-Magnitude Data	
15	20/9/2023		Booth Multiplication Algorithm	
16	22/9/2023	Digital Logic	Logic Gates: Symbols and Truth Table	
17	23/9/2023		Boolean Algebra, Logic Diagram De Morgan's Theorem	
18	27/9/2023		CT-1	
19	29/9/2023		Combinational Circuits: Block Diagram, Half Adder , Full Adder	
20	30/9/2023		Flip Flop: SR, D Flip Flop	
21	04-10-23		Example of a sequential circuit ,Decoder & Encoder: 3 to 8	
22	06-10-23		Multiplexer & De Multiplexer: 4 to 1 line.	
23	07-10-23	Basic Architecture of Microprocessor 8085	Basic features of 8085 Microprocessor,Block Diagram of 8085 Microprocessor	
24	11-10-23		Functions of various blocks Concept of Buses	
25	13/10/2023		Bus Multiplexing and De-multiplexing	
26	18/10/2023		Addressing Modes and Interrupts, Status Flags	
27	20/10/2023	Central Processing Unit	Major Components of CPU, General Register Organization	
28	21/10/2023		Control Word, Stack Organization Register and Memory Stack	
29	25/10/2023		Reverse Polish Notation and Evaluation of Arithmetic Expressions	
30	27/10/2023		CT-2	
31	03-11-23		Instruction formats – Three Address Instructions, Two Address Instructions, One Address Instructions, Zero Address Instructions	
32	04-11-23		Brief Introduction to RISC and CISC Processors,	
33	08-11-23		House Test	
34	10-11-23			
35	17/11/2023		Concept of Parallel Processing and Pipelining.	
36	18/11/2023	Memory Organization	Components of memory hierarchy: main memory	
37	22/11/2023		auxiliary memory and cache memory	
38	24/11/2023		Introduction to Associative Memory, Cache Memory	
39	25/11/2023		Locality of Reference, Hit Ratio,	
40	29/11/2023		Writing into Cache - Write Through	
41	01-12-23		Write Back, Input-Output Interface –Purpose, I/O Versus Memory BUS	
42	02-12-23		Isolated versus Memory-Mapped I/O.	