# Lesson Plan for the Semester Starting:16<sup>th</sup> January 2023

Name of the Subject: ADA

**Subject Code: B.Sc.-203** 

Name of the institution: DAV Institute of Management

Name of the teacher with designation: Ms. Akanksha (Assistant Professor)

Department: BSc. H CS

Month	Class	Date of Class Taken	Topic /Chapter Covered	Academic Activity	Test/ Assignment	Deviation (if any)
Jan	1		Unit – 3: Tree Data structure Definition and its terminologies: Leaf node, Sibling, Degree of the Node, Degree of the Tree	Lecture		
	2		Level of the Node, Path, Binary Tree, Difference Between Binary Tree and Complete Binary Tree, Strictly Binary Tree, Complete Binary Tree, Extended Binary Tree	Lecture		
	3		Tree Traversal Algorithms: Preorder, Post order and Inorder Algorithms with examples	Lecture		
	4		Memory Representation of Binary tree :Sequential Representation and Linked List Representation	Lecture		
	5		Binary Search Tree :Definition, Insertion and Searching Algorithms with example	Lecture		
	6		Binary Search Tree :Deletion Algorithm	Lecture		
	7		AVL Search Tree: Definition, Insertion and Searching Algorithms with examples	Lecture		

	8	AVL Search Tree: Deletion algorithm with example	Lecture
	9	m-way search Tree: Definition and Insertion Algorithm	Lecture
	10	m-way search tree Deletion with example	Lecture
Feb	1	B tree Definition, Insertion and Searching Algorithm	Lecture
	2	B Tree Deletion Algorithm with example	Lecture
	3	B+ Tree and Huffman's Algorithm with example	Lecture
	4	General Trees	Lecture
	5	Unit 4 : Graph Data Structure: Definition, Tree Vs Graph, Importance of Graph	Lecture
	6	Representation of Graph in memory	Lecture
	7	Operations on Graph : Searching of a node and edge	Lecture
	8	Insertion of a node and an edge	Lecture
	9	Deletion of a node and an edge	Lecture
	10	Warshells algorithm for shortest Path	Lecture
	11	Dijkstra algorithm for shortest Path	Lecture
March	1	Graph Traversal Algorithms :DFS and BFS	Lecture
	2	Topological Sorting with example	Lecture

	3	Minimum spanning Tree : Prim and Kruskal's Algorithms	Lecture
	4	Graph Component Algorithm with example	Lecture
	5	String Introduction :How to input and print string with various I/O Functions	Lecture/La b activity
	6	Practical Implementation of various string related functions	Lecture/La b activity
	7	String matching algorithm: KMP	Lecture
	8	Boyer Moore Algorithm	Lecture
	9	Unit- 1: Sorting and Types of Sorting, Complexity of an algorithm in terms of Time and Space Complexity	Lecture
	10	Finding Complexity of various algorithms like sum of 'N; numbers, GCD	Lecture
	11	Radix Sort: Introduction, algorithm and its complexity	Lecture
	12	Practical Implementation of Radix Sort	Lecture/La b activity
	13	Quick Sort: Introduction, algorithm and its complexity	Lecture
	14	Practical Implementation of Quick Sort	Lecture/La b activity
	15	Heap Sort: Introduction, algorithm and its complexity	Lecture
April	1	Practical Implementation of Heap Sort	Lecture/La b activity
	2	Merge Sort: Introduction, algorithm and its complexity	Lecture
	3	Practical Implementation of Merge Sort	Lecture/La b activity

4	Shell Sort: Introduction, algorithm and its complexity	Lecture
5	External sort	Lecture
6	Searching: Linear Search: Implementation	Lecture/La b activity
7	Binary Search: implementation and its complexity	Lecture/La b activity
8	Unit – 2: Dynamic Programming Introduction, its application in matrix multiplication	Lecture
9	<b>Optical Binary Search Tree</b>	Lecture
10	NP Complete Problem Introduction	Lecture
11	Examples of problems in the NP Class	Lecture
12	Complexity classes P and NP	Lecture
13	Parallel algorithms: Parallelism	Lecture
14	PARAM and other Models	Lecture
15	Finding maximum element in a list, Merging and Sorting	Lecture

Lesson Plan for the Semester Starting: 16<sup>th</sup> January 2023

Name of the subject: System Analysis & Design

Subject Code: Bsc 201, Semester: 2<sup>nd</sup>

Name of the Institution: DAV Institute of Management

Name of the teacher with designation: Dr. Shobha Bhatia

**Department:B.Sc Hons. CS** 

lonth	Class	Date of Class taken	Topic/Chapter Covered	Academic Activity	Test/Assignme nt	Deviatio n if any
	1		CONTEMPORARY SYSTEMS, SYSTEM			
	2		CHARACTERSTICS & TYPES OF SYSTEMS			
	3		SYSTEM COMPONENTS&ENVIORNMENT			
	4		CLASSIFICATION OF SYSTEMS			
	5		CONTDCLASSIFICATION OF SYSTEM			
	6		INTRO TO CASE STUDIES			
	7		SYSTEM ANALYST, ROLE, QUALITIES			
	8				REVISION AND DOUBTS	
	9		SYSTEM PLANNING, DIMENSIONS			
	10		SYSTEMS FEASIBITY WITH EXAMPLE, PROCESS			
	11		PLANNING &EVALUATING ALTERNATIVES			
	12				TEST1	
	13		PROJECT MANAGEMENT &CONTROL			
	14		TYPES OF FEASIBILITY AND OBJECTIVES			
	15		COST BENEFIT ANALYSIS			
	16		SYSTEM ANALYSIS&TOOLS			
	17		PRIMARY V/S SECONDARY DATA			
	18		DATA COLLECTION & ANALYSIS			
	19		STRUCTURED ANALYSIS			
	20				REVISION & DOUBTS	
	21		SYSTEM DESIGN & ITS OBJECTIVES			

22	DESIGN APPROACHES	
23	PHYSICAL & LOGICAL DESIGN	
24	INPUT-OUTPUT,FORM DESIGN	
25	FILE & DATABASE DESIGN	
26	DBA &ITS ROLE	
27	DDA WITS ROLE	REVISION &
		DOUBTS
28	STRUCTURED DESIGN	
29	MODULAR DESIGN & APPROACH	
30	PROGRAM SPECIFICATION	
	&CODING	
31	REPORT DESIGN AND DESIGN	
	ISSUES	
32	SYSTEM TESTING & TESTING	
	STRATEGIES	
33	TYPES OF TESTING	
34	TESTING PROCESS, ROLE OF	
	SYSTEM TESTING ENGINEER	
35	IMPLEMENTATION	
36	USER TRAINING, STRUCTURED	
	WALKTHROUGH	
37	SYSTEM CONVERSIONS & METHODS	
38	HARWARE SOFTWARE SELECTION	
39	SYSTEM FOLLLOWUPS, SYSTEM	
	MAINTENCE	
40	SYSTEM RECOVERY, SYSTEMS	
	BACKUPS	
41	PREVIOUS YEARS QUESTION PAPER	
	DISCUSSION	
42		REVISION & DOUBTS
43	LAB 1	
44	LAB2	
45	LAB 3	
46	LAB 4	
47	LAB 5	
48	LAB 6	
49		
50		

<sup>\*</sup>Above are the minimum number of classes to be scheduled for the subjects having classes 5 days per week. For subjects having classes 4 days per week and 3 days per week, the number of lectures are to be reduced i.e. 30 minimum number of classes for 3 days per week subject and 36 minimum number of classes for 4 days per week subject.

### Lesson Plan For Semester Starting w.e.f16 jan2023

#### Name of the Subject:-Mathematices-2

Subject Code:- BSc . 202

Name of Institute:-DAV Institute of Management, FARIDABAD,

Name of teacher with designation:- Ms. Pooja Goyal, (ASSST. PROFESSOR)

Department:- BSc(hons) Comp. Sci

Month	Class	Date of class	Topic/Chapter Covered	Academic activity	Test/Assig nment	Deviation if any
		Taken				•
Jan	1		Taylor Series(exponential)	Lecture		
	2		Taylor Series(exponential	Lecture		
			series)			
	3		Macalurin test	Lecture		
			(exponential series)			
	4		Macalurin test (xponential	Lecture		
			series)			
	5		Taylor	Lecture		
			series(Logairthmetic)			
	6		Macalurin test	Lecture		
			(logairthmetic series)			
	7		Macalurin test (Sin x, Cos	Lecture		
			X)			
	8		Real no. system as a	Lecture		
			Complete order field			
	9		Real no. system as a	Lecture		
			Complete order field			
	10		Neighbour hood	Lecture		
Feb	1		Neighbour hood practical	Lecture		
			question			
	2		Open and closed set	Lecture		
	3		Open and closed set	Lecture		
			practical question			
	4		Open and closed set	Lecture		
	_		theorem	_		
	5		Limit point of a set	Lecture		
	6		Bolzwnoweierstrans theorem	Lecture		
	7		Concept of un and un++	Lecture		
	8		Concept of un and un++	Lecture		

	9	Dtest theorem	Lecture		
	10	D test practical question	Lecture		
	11	1		Test of D	
				test	
	12	Rabees test	Lecture		
	13	Cauchy integral test	Lecture		
	14	Alternate series	Lecture		
	15	Absolute and conditional	Lecture		
		convergence			
March	1	Absolute and conditional	Lecture		
		convergence			
	2	Taylor series		Test	
	3	Rabees Test		Test	
	4	Macalurin test		Test	
	5	Previous year Question			
		paper Discussion of unit 4			
		and unit 1			
	6	Mean value theorem	Lecture		
	7	Mean value theorem	Lecture		
	8	Monotonic sequence	Lecture		
	9	Monotonic sequence	Lecture		
	10	Sequence convergence	Lecture		
	11	Sequence convergence	Lecture		
	12	Cauchy sequence	Lecture		
April	1	Limit superior	Lecture		
	2	Limit inferior sequence	Lecture		
	3	Limit inferior sequence	Lecture		
	4	Infinite series basic	Lecture		
	5	Infinite series basic	Lecture		
	6	P test	Lecture		
	7	Geometric Series test	Lecture		
	8	Comparision test	Lecture		
	9	Limit continuity	Lecture		
	10	Limit continuity	Lecture		
	11	Sequential continuity	Lecture		
	12	Algebra of continuous	Lecture		
		function			
	13	Continuity of complete function	Lecture		
	14	Intermediate value theorem	Lecture		
	15	Doubt Class	Lecture		
	1.3	Doubt Class	Lecture		

### Lesson Plan For Semester Starting w.e.f16 jan2023

#### Name of the Subject:- **DIGITAL ELECTRONICS**

Subject Code:- BSc . 204

Name of Institute:-DAV Institute of Management, FARIDABAD,

Name of teacher with designation:- Ms. Jyoti Ahuja, (ASSST. PROFESSOR)

Department:- BSc(hons) Comp. Sci

Month	Class	Date of class Taken	Topic/Chapter Covered	Academic activity	Test/Assi gnment	Deviation if any
Jan	1		Introduction to basic gates			
	2		Universal gates			
	3		Postulates of boolean algebra,Laws of Boolean algebra			
	4		Boolean operator & truth table			
	5		Boolean Expression, Demorgans theorem			
	6		<b>Universal building blocks</b>			
	7		Simplification of logic circuits: SOP,POS			
	8		Algebraic simplification			
	9		K-map minimization techniques using SOP			
	10		K-map minimization techniques using POS			
Feb	1		Q-M minimization			
	2		Q-M minimization			
	3				DOUTS OF UNIT-2	
	4		Introduction to basic gates			
	5			Lecture		
	6		INTRO TO LOGIC CIRCUITS	Lecture		
	7		INTRO toSequential circuits	Lecture		
	8		Combinational circuits			
	9		Half Adder			
	10		Full Adder			
	11		Half subtractor			
	12		Full subtractor			

combinati onal circuits  14 Encoder	
circuits 14 Encoder	
14 Encoder	
15 Decoder	
March 1 Multiplexer	
2 demultiplexer Douts of	
encoder,d	
ecoder	
3 comparators	
4 Intro to flip flop	
5 S-R FLIP FLOP	
6 STATE DIAGRAM	
AND CHARACTERSTIC	
EQUATION OF S-R CLOCKED S-R FLIP	
FLOP	
8 J-K FLIP FLOP	
9 STATE DIAGRAM	
STATE DIAGRAM AND	
CHARACTERSTIC	
EQUATION EQUATION	
10 T-FLIP FLOP	
11 MASTER SLAVE FLIP	
FLOP(RACE AROUND	
CONDITION)	
12 MASTER SLAVE J-K	
FLIP FLOP	
April INTRO TO	
1 COUNTER,RIPPLE OR	
SERIAL COUNTER	
2 ASYNCHRONOUS	
DOWN COUNTER	
3 UP-DOWN COUNTER	
4 PARALLEL	
COUNTER(SYCHRON	
OUS COUNTER)	
5 SECONDARY Lecture	
MEMORY	
6 TYPES OF Lecture	
SECONDARY	
MEMORY	
7 CACHE Lecture	
MEMORY,FLASH	
MEMORY	
8 DIODE AND Lecture	
TRANSISTOR	
CHARACTERSTICS	
9 LOGIC CIRCUITS(FAN Lecture	
IN, FAN	
OUT,PROPOGATION	

	DELAY		
10	Doubt Class	Lecture	
11	Doubt Class	Lecture	
12	Doubt Class	Lecture	
13	Doubt Class	Lecture	
14	Doubt Class	Lecture	
15	Doubt Class	Lecture	

# **Lesson Plan for the Semester Starting: 16 January, 2023**

Name of the subject: Data Base System

Subject Code: B.Sc-401

Name of the Institution: DAV Institute of Management

Name of the teacher with designation: Ms. Pooja Gour (Assistant Professor)

Department: B.SC.

Month	Class	Date of Class taken	Topic/Chapter Covered	Academic Activity	Test/Assignment	Deviation if any
January	1		Introduction to			
			Subject			
	2		Introduction to			
			Database			
	3		DBMS			
			Components			
	4		Characteristics,			
			objective &			
			importance			
	5		File System Vs.			
			DBMS,			
			Advantage of			
			DBMS			
	6		Disadvantage of			
			DBMS, Data			
			Security			
	7		Data Abstraction,		Assignment	
			Data Integration			
	8		Data Consistency,			
			Record & Files			
	9		DBA & its Role			
	10		Doubt Class			
	11		Test		Test	
	12		Architecture of			
			Database System			
	13		3- Level			

	Architecture			
14	Data			
	Independence			
15	Database Model			
16	ER Model		Assignment	
17	Relational Model		Assignment	
	Network Model		8	
	Hierarchical		Assignment	
	Model		7 ISSISIMICIT	
	Advantage &			
	Disadvantage of			
	these model			
	RDBMS &			
	OORDBMS			
	Doubt Class			
	Test		Tant	
			Test	
1 1 1	Basic Concepts of			
	RDBMS,			
	Characteristics of			
	RDBMS			
	Data Constraints		Assignment	
	Primary Key,			
	Foreign Key,			
	Candidate Key &			
	secondary key			
	Relational Data			
	Manipulation			
	Relational		Assignment	
	Functional			
	Dependencies			
	Partial Functional			
	Dependency			
	Transitive			
	Dependency &			
	Join Dependency			
	Lossless			
	decomposition,			
	Finding keys		A ·	
	Normalization		Assignment	
	importance			
	Normalization			
	SQL data types &			
25	components			
	DDL, DML, DCL,			
	TCL,DQL	T -1- A -4::4		
	SQL Commands	Lab Activity		
	SQL commands			
	Savepoint, grant,			
	revoke	T als A -4::4-	Aggiousses	
1 1 1	Commit and	Lab Activity	Assignment	
	rollback			
	commands			
	Query Processing			
41	Query			

	Optimization	
42	Doubt Class	
43	Test	Test
44	Revision	
45	Revision	

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Lesson Plan for the Semester Starting: 16<sup>th</sup> January 2023

Name of the Subject: Operating System

**Subject Code: B.Sc.-403** 

Name of the institution: DAV Institute of Management

Name of the teacher with designation: Ms. Akanksha (Assistant Professor)

Department: BSc. H CS

Month	Class	Date of Class Taken	Topic /Chapter Covered	Academic Activity	Test/ Assignment	Deviation (if any)
Jan	Introduction		Lecture/ PPT			
	2	Operating System definition and functions/ Importance of OS		Lecture/ PPT		
	3		History of OS and OS as a Resource Manager	Lecture/ PPT		
	s		OS Types: Single user/ single Program OS, Batch Processing OS	Lecture/ PPT		
and Multi		Multi programming OS and Multitasking/ Time Sharing OS	Lecture/ PPT			

	6	Multiprocessing and Real Time OS	Lecture/ PPT	
	7	System Calls and types	Lecture/ PPT	
	8	OS Architecture: Simple and Layered	Lecture/ PPT	
Feb	1	OS Architecture: Kernel and Microkernel	Lecture/ PPT	
	2	Process, Process Control Block, Process Transition Diagram	Lecture/ PPT	
	3	CPU Scheduling, Scheduling Criteria, Levels of Schedulers: Long Term, middle Term and Short-Term Scheduler	Lecture/ PPT	
	4	Process Scheduling: Types of Process Scheduling: Non-Pre- emptive and Pre- emptive, FCFS, SJFS	Lecture/ PPT	
	5	Round Robin Scheduling, Time Sharing Scheduling	Lecture/ PPT	
	6	Multiple-Processor Scheduling, Real-Time Scheduling	Lecture/ PPT	
	7	Memory Management Introduction: Logical versus Physical Address Space, MMU, Memory Management Techniques: Continuous and Non- Continuous Memory Techniques.	Lecture/ PPT	
	8	Internal and External Fragmentation, Compaction, Swapping,	Lecture/ PPT	

	9	Paging, Page map table, Adv and disadvantage	Lecture/ PPT	
	10	Segmentation, Segmentation with Paging	Lecture/ PPT	
March	1	Demand Paging, Performance of Demanding Paging,	Lecture/ PPT	
	2	Page Replacement, Page Replacement Algorithm,	Lecture/ PPT	
	3	File Naming, types File Operations, Access methods	Lecture/ PPT	
	4	File Structure, File Operation	Lecture/ PPT	
	5	Directory Structure and Directory Operations	Lecture/ PPT	
	6	File Space Allocations, File sharing and File Locking	Lecture/ PPT	
	7	Symbolic Link, File Protection and Security, Distributes File Systems	Lecture/ PPT	
	8	Device Management Function, I/O Devices and Controller, Interrupt Handlers	Lecture/ PPT	
	9	Device Independent I/O, I/O Software	Lecture/ PPT	
	10	Disk Scheduling: Types of Disk Scheduling: FCFS, Shortest Seek Time Scheduling	Lecture/ PPT	
	11	SCAN, C-SCAN, LOOK and C-LOOK Scheduling	Lecture/ PPT	

	12	Concurrent Programming, Sequential and Concurrent Process, Producer Consumer Problem	Lecture/ PPT	
	13	Critical Section Problem, Bernstein's Condition	Lecture/ PPT	
	14	Semaphore and its types, Mutual Exclusion Problem	Lecture/ PPT	
	15	Classical Co-ordination Problem	Lecture/ PPT	
April	1	Inter Process Communication	Lecture/ PPT	
	2	System Model, Dead locks Characterization,	Lecture/ PPT	
	3	Methods for Handling Deadlocks Deadlock Prevention	Lecture/ PPT	
	4	Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	Lecture/ PPT	
	5	Shell Programming: Concept of shell, Types of shell	Lecture/ PPT	
	6	Editors for shell programming (e.g., vi)	Lecture/ PPT	
	7	basics of Shell programming: Introduction, Data Types	Lecture/ PPT	
	8	Control Structure, Developing Simple Shell programs in UNIX	Lecture/ PPT	
	9	Process Management in Unix	Laecture/ PPT	

10	Process Management in Unix	Lecture/ PPT	
11	I/O Management in UNIX	Lecture/ PPT	
12	I/O Management in UNIX	Lecture/ PPT	
13	Unix File System	Lecture/ PPT	
14	Unix File System	Lecture/ PPT	

## **Lesson Plan for the Semester Starting: 16 January, 2023**

Name of the subject: Microprocessor-1

Subject Code: B.Sc 404

Name of the Institution: DAV Institute of Management

Name of the teacher with designation: Ms preeti Goswami (Assistant Professor)

Department: B.SC(H) Computer Science

Month	Class	Date of Class taken	Topic/Chapter Covered	Academic Activity	Test/Assignment	Deviation if any
January	anuary 1 1 Classification Of Computer,Concept Of Microprocessor		Computer,Concept Of		1	NA
	2	1	Evolution of Microprocessor		1	
	3	2	8085 MIcroprocesser Bus architecture			
	4	2	8085 pin Diagram			
	5	1	Introduction of ALU		1	
	6	1	Different Types Of Register			
	7	2	Introduction of 8086 Bus Architecture			

8	1	Comparison of 8085 & 8086		
9	2	8086 Pin Diagram		
10	1	Intel Series of Microprocessor	1	
11	1	Motorola series of microprocessor	1	
12	2	8255 PPI		
13	1	Pin Diagram of 8255		
14	1	8255 PPI	Test	
15	2	8279 programmable key board and Display		
16	1	Pin Diagram 8279		
17	1	DMA Controller & Types		
18	3	8237/8257 DMA Controller		
19	5	Interfacing with 8085 and 8086 different chips		
20	3	Assembly Language of 8085 &8086		

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Lesson Planning for the semester January, 2023

Name of Institute : DAVIM

Name Of Teacher With Designation :MS.JYOTI AHUJA

Department :B.SC(HONS.)

Subject Name : SCIENTIFIC AND STATISTICAL

**COMPUTING** 

		Date of				<b>Deviation If any</b>
Month	Class	class taken	Topic/Chapter Covered	Academic Activity	Test /Assignm ent	
Jan	Lec1		ITERATIVE METHODS:BIS ECTION			
	Lec 2		FALSE POSITION			
	Lec3		NEWTON RAPHSON METHOD			
	Lec4		BAIRSTOWS METHOD			
	Lec 5		DIFFERENTIA L EQUATION:G AUSS ELIMINATION METHOD			
	Lec 6		PIVOTING,III- CONDITIONE D EQUATIONS			
	Lec 7		GAUSS- SEIDAL ITERATIVE METHOD			
	Lec 8		EULER METHOD,EUL ER MODIFIED METHOD,PRE DICTOR- CORRECTOR METHODS			
	Lec 9		EULER MODIFIED METHOD			
	Lec 10		PREDICTOR CORRECTOR METHODS			
Feb	Lec 11		TAYLOR SERIES METHOD			
	Lec 12		,RUNGE – KUTTA METHOD			
	Lec 13		INTERPOLATI ON :NEWTON			
	Lec 14		LAGRANGES AND DIFFERENCE			

		TABLES			
	Lec 15	CHEBYSHEY POLYNOMIAL :FIRST KIND,SECOND KIND AND THEIR RELATIONS			
	Lec 16	ORTHOGONA L PROPERTIES			
	Lec 17			DOUTS OF UNIT-2 AND REVISIO N	
	Lec 18	BASIC STATISTICS:(F REQUENCY DISTRIBUTIO N:INCLUSIVE SERIES,EXCL USIVE SERIES)			
Month	Class	Topic/Chapter Covered	Academic Activity	Test /Assignm ent	
	LEC 19	MEASURE OF CENTRAL TENDENCY (AIRTMETIC MEAN:,SHORT CUT METHOD,STE P DEVIATION METHOD			
	LEC 20	GEOMETRIC MEAN(INDIVI DUAL SERIES,COMB INED GROUP)			
	LEC 21	MEDIAN(FOR INDIVIDUAL SERIES,FOR FREQUENCY DISTRIBUTIO N			
	LEC 22	MODE(BY INSPECTION			

		AND CONTINOUS)			
	LEC 23			DOUTS AND REVISIO	
	LEC 24			TEST OF CENTRA L TENDEN	
March	LEC 25	MEASURE OF DISPERSION:R ANGE		CY	
	LEC 26	MEASURE OF DISPERSION:( VARIANCE AND STANDARD DEVIATION)			
	LEC 27	MEASURE OF DISPERSION:( VARIANCE AND STANDARD DEVIATION)			
	LEC 28			REVISIO N OF MEASUR E OF DISPERS ION	
	LEC 29	MOMENTS		TOTA	
	LEC 30	MOMENTS GENERATING FUNCTION			
Month	Class	Topic/Chapter Covered	Academic Activity	Test /Assignm ent	
	LEC 31	CORRELATIO N:DEGREE OF CORRELATIO N			
	LEC 32	KARL- PEARSON'S COEFFICIENT OF CORRELATIO N			
	LEC 33		PRACTICE EXAMPLE		

	LEC	SPEARMAN'S			
	34	RANK			
	34	CORRELATIO			
		N			
	LEC	11	PRACTICE		
	35		EXAMPLE		
		PECPECCION	EXAMILE		
	LEC	REGRESSION,			
	36	LINES OF			
		REGRESSION			
	LEC	LEAST			
	37	SQUARE			
		METHOD			
	LEC		PRACTICE		
	38		QUESTION		
April	LEC		PRACTICE		
Axpin	39		QUESTION		
		7 TERRE	QUESTION		
	LEC	<b>Z-TEST</b>			
	40				
	LEC		PRACTICE		
	41		EXAMPLE		
	LEC	STUDENT T-			
	42	TEST			
	LEC	TEST	PRACTICE		
	-43		EXAMPLE		
	LEC	CHI-SQUARE			
	44	TEST			
	LEC		PRACTICA		
	45		L		
			EXAMPLE		
	LEC	CURVE			
	46	FITTING:MET			
		HOD OF			
		LEAST			
	LEC	SQUARES			
	LEC	POLYNOMIAL			
	47	FIT			
	LEC	FLOATING			
	48	POINT			
		NUMBERS,RE			
		PRESENTATIO			
		N			
	LEC	AIRTHMETIC			
	49	OPERATION			
		WITH			
		NORMALIZED			
		FLOATING			
		POINT			
		NUMBERS			
	LEC				
		ERROR IN			
	50	NUMBER			
		REPRESENTA			
		TION-			
		INHERENT			
		ERROR			
			·	·	

LEC		PRACTICE		
51		EXAMPLE		
LEC	TRUNCATION			
52	ABSOLUTE,RE			
	LATIVE,PERC			
	ENTAGE AND			
	<b>ROUND OFF</b>			
	ERROR			

# Lesson Plan for semester starting w.e.f16<sup>th</sup>Jan, 2023

Name of the Subject- Programming in Java

Subject code-

Name of Institute: D. A. V Institute of Management

Name of teacher with designation: Esha Khanna, Assistant Professor (IT)

Department: BSc

Month	S.	Date of	Topic/ Chapter	Academic	Test/	Deviation,
	No.	class	covered	activity	Assignment	if any
		taken				
		on				
Jan	1		Java's History,	Lecture		
			Creation, Java as			
			language of Internet			
	2		JVM and platform	Lecture		
			Independence, Byte			
			code, difference			
			between JVM, JDK			
			and JRE			
	3		Java v/s C++: who is	Lecture, Group		
			more object	Discussion		
			oriented?			
			Comparison, C++			
			recap			
	4		Features of Java,	Lecture		
			Automatic garbage			
			collection			
	5		Program structure of	Lab,		
			Java, First Java	Demonstration		
			Program			
	6		Java class Library,	Lab	Assignment	
			Basic Programs for		(Lab	

	practice		Assignment 1)
7	Java: Data Types, Variables and Operators, operator precedence	Lecture	
8	Control Structure in Java, Programs	Lab, Demonstration	
9	Defining Classes & Methods-syntax and programs.	Lecture	Assignment (Theory Assignment 1)
10	Constructors- Importance, Why required, Types, Constructor Overloading	Lecture, Demonstration, implementation	
11	Revision unit 1	Test	
12	Final Keyword in Java	Lab Demonstration	
13	Matrices 2D and 3D	Lecture	
14	Matrices programs	Lab, implementation	
15	Destructors	Lecture, implementation	
16	Keywords in Java- New operator, this reference,	Lecture	
17	Arrays, syntax in java, types and programs	Lecture, Demonstration	
18	Vectors	Lecture, Demonstration	Assignment (Lab Assignment 2)
19	Strings in Java- String class, String Handling using String class	Lecture, Demonstration	
20	SrtingBuffer class, Difference between StringBuffer and String class	Lecture, Demonstration	
21	Strings programs	Lab, Implementation	Assignment (Theory Assignment 2)
22	Inheritance- Reusability, class inheritance, choosing base class, access attributes- Syntax	Lecture	
23	Types of Inheritance- single level, super keyword	Lecture, Demonstration	

24	Multilevel, hierarchal	Lab Implementation	
	Inheritance		
25	Abstract classes	Lecture	
26	Concept of Interface,	Lecture,	
	Multiple Inheritance	Demonstration	
27	Polymorphism,	Lecture,	
	Function	Demonstration	
	Overloading		
28	Interfaces, function	Lab,	Assignment
	overloading,	Implementation	(Lab
	Dynamic Binding		Assignment
		_	3)
29	Exception handling,	Lecture,	
	Concept, Types of	Demonstration	
	Exceptions, Try-		
20	Catch keywords	Lastria	
30	Finally, Throw and Throws keywords	Lecture, Demonstration	
31	Creating own	Lab,	Assignment
	exceptions, programs	Implementation	(Theory
	exceptions, programs	Implementation	Assignment
			3)
32	Packages, Defining	Lecture,	
	and creating	Demonstration	
	packages		
33	Adding classes and	Lecture,	
	importing classes,	Demonstration	
	classpath		
34	Packages programs	Lab,	
		Implementation	
35	Multithreading	Lecture	
	Programming: The		
	Java Thread Model,		
36	The Main Thread	Lastura	
30	Creating Multiple Thread- 2 methods,	Lecture, Demonstration	
	Programs	Demonstration	
37	Thread Priorities	Lecture,	
	Timeda Timenas	Demonstration	
38	Thread programs,	Lab,	Assignment
	Runnable Interface	Implementation	(Lab
	and Thread Class,	_	Assignment
	Setting Priorities.		4)
39	Test		Test 3
40	Input/ Output in java,	Lecture	
	Basics, Byte and		
41	Character Structures	T	
41	I/O classes, reading	Lecture,	
	console input,	Demonstration	
	writing console		
42	Output  Pooding and writing	Lab,	
42	Reading and writing on Files	Implementation	
43	Random Access	Lecture,	Assignment
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	Files, Storing and	Demonstration	(Theory
	retrieving objects,		Assignment
	stream benefits		4)
44	Applets basics,	Lecture	
	architecture, Life		
	cycle		
45	Applet program-	Lecture,	
	syntax, first applet,	Demonstration	
	HTML APPLET Tag		
46	Simple applet	Lecture,	
	display methods	Demonstration	
47	Passing Parameters	Lab,	
	to Applets	Implementation	
48	Lab- Applets	Lab,	Assignment
		Implementation	(Lab
			Assignment
			5)
49	Revision & Doubts	Revision	
50	Revision- Previous	Revision	
	year papers		

Lesson Plan For Semester Starting w.e.f16 Jan2023

Name of the Subject:- Theory of Computation

Subject Code:- BSc . 604

Name of Institute:-DAV Institute of Management,FARIDABAD,

Name of teacher with designation:- Ms. Pooja Goyal, (ASSST. PROFESSOR)

Department:- BSc(hons) Comp. Sci

Month	Class	Date of class Taken	Topic/Chapter Covered	Academic activity	Test/Assig nment	Deviation if any
Jan	1		Basic concept of automation	Lecture		
	2		Basic concept of automation	Lecture		
	3		Evolution of the components of System Programming	Lecture		
	4		Chomsky hierarchy	Lecture		
	5		Chomsky hierarchy	Lecture		
	6		Regular grammar	Lecture		
	7		Regular grammar	Lecture		
	8		Evolution of the components of System Programming	Lecture		
	9		Assembler	Lecture		
	10		Loader	Lecture		
	11		Linker	Lecture		
	12		Macros and Compilers	Lecture		

	13	Design and	Lecture		
		implementation of a			
		syntax analyzer generator			
		Macros and Compilers			
February	1	Software tool: text editors	Lecture		
1 cordary	2	Interpreters and program	Lecture		
	2		Lecture		
	2	generators	T 4		
	3	Debug, monitor	Lecture		
	4	Programming environment	Lecture		
	5	Compiler	Lecture		
	6	Phase of compilers	Lecture		
	7	Turing acceptability and Turing	in <b>&amp; detuid</b> abilit	ty	
		Un solvability of problem			
	8	Basic operation on			
		language			
	9	Union, intersection,	Lecture		
		complementation	Lociale		
		Complementation			
	10	Vlaana atau	Lecture		
		Kleene star,			
	11	Regular language and	Lecture		
	10	regular expressions			
	12	CFG	Lecture		
	13	NDPDA,DPDA	Lecture		
	14	regular expressions	Lecture		
	15	NDFA	Lecture		
March	1	Conversion to nfa/dfa	Lecture		
	2	Design and	Lecture		
	-	implementation of a	2000010		
		syntax analyzer generator			
	3	Top down v/s bottom up	Lecture	+	
	3		Lecture		
	4	parsing technique	T .		
	4	Models of computation:	Lecture		
		turing machine			
	5	Program based on string	Lecture\la		
			b		
	6	Program based on binary	Lecture\la		
		operation	b		
	7	Program based on stack	Lecture\la		
			b		
	8	Program based on state	Lecture\la		
	-	conversion	b		
	9	Turing machine	Lecture		
	10	Turning acceptability	Lecture		
	11	turning decidability	Lecture		
	12	Insolvability of problems	Lecture		
		(Halting problems and			
		others).			
T	13	Insolvability of problems	Lecture		
		(Halting problems and			
		others).			
		ĺ			
	14	Universal Turning	Lecture		
	14	i Universal Lurning	Lecture	1	

		machine		
	15	solving problem turning machin		
April	1	solving problem turning machin	on Lecture	
	2	Previous year ques paper discussion		
	3	Previous year ques paper discussion		
	4	Previous year ques paper discussion		
	5	Previous year ques paper discussion		
	6	Unit-1 doubt cla	ass Lecture	
	7	Unit 2 doubt clas	ass Lecture	
	8	Unit -3 doubt cla	ass Lecture	
	9	Unit -4 doubt cla	ass Lecture	

### Lesson Plan for the Semester Starting: 19th January'23

Name of the subject: Internet Technologies

**Subject Code:B.sc 601** 

Name of the Institution: DAV Institute of Management

# Name of the teacher with designation: Ms. Monica Khatri (Assistant Professor in DAVIM)

**Department: MCA** 

Month	Clas	Date of Clas s take n	Topic/Chapter Covered	Academic Activity	Test/Assignm ent	Deviatio n if any
January'23	1		UNIT-1 (Introduction)Inter net Basics features, Evolution of Internet	Lecture		
	2		Concept of WWW, URL, DNS, Browser	Lecture		
	3		Internet, Intranet &Extranet	Lecture	Assignment 1	
	4		Different methods of Accessing the Internet	Lecture		

	5	ISP, Modem,	Lecture/Discussi	
		Broadband, Email	on	
	6	Exchange server/ Proxy server	Lecture	Assignment 2
	7	Search engines,	Lecture	
		role use of current tools		
	8	DSL, 2G/3G, GPRS	Lecture	
	9	Mobile Internet, Wifi, WiMax, Edge, HSDPA	Lecture	Assignment 3
February' 23	10	Survey of contemporary internet Technologies	Lecture	
	11	Revision of Unit-1	Lecture/Discussi on	
	12	UNIT-2(TCP/IP)	Lecture	Assignment 4
	13	Role of transport layer in Internet,	Lecture	
	14	Role of Network Layer in Internet	Lecture	
	15	IP vs. UDP, HTTP vs. FTP, SMTP	Lecture	
	16	IPv4 vs. IPv6, Protocol	Lecture	Assignment 5
	17	Hierarchy in InternetPPP, IMAP	Lecture	
	18	Basic TCP / IP name space, Correctness & Protocol	Lecture	
	19	Revision of Unit-2	Lecture	Assignment 6
	20	UNIT-3(Internet in work)Concept of scripting Language HTML Basics and Features	Lecture	
	21	Programming part of HTML, HTML basic tags, Formatting Tags	Lecture	
	22	HTML Techniques of Text and image	Lecture	Assignment 7
March'23	23	Table in HTML ,HTML Forms	Lecture	
	24	HTML color, list, blocks,DHTMLvs/ HTML	Lecture	
	25	Revision of	Lecture/Discussi	Assignment 8

		HTML	on	
	26	UNIT-4 (Other	Lecture	
		<b>Technologies</b> )		
	27	Overview of CGI,	Lecture	
	28	JavaScript vs. VB	Lecture	
		Script		
	29	Javascript Data	Lecture	Assignment 9
		type, String,		
		Dates, forms		
	30	Javascript syntax,	Lecture	
		assignment,		
		arithmetic		
		Operator		
June	31	Javascript Data	Lecture	
		type, String,		
		Dates, forms		
	32	PHP, Function	Lecture	
		Arrays		
	33	ASP intro forms	Lecture	Assignment 10
		data types		
	34	ASP classes,	Lecture	
		ADO objects		
	35	PHP forms, date	Lecture	
		calendar		
	36	Macromedia	Lecture	
		Adobe Flash		
		software like		
		Flash		
	37	My Sql: Create	Lecture	Assignment 11
		Table, insert into,		
		update, select		
		commands		
	38	My SQL: SQL	Lecture	
		count, AVG, Sum,		
		MIN, Max		
April'23	39	My SQL: NULL,	Lecture	
		ALTER, Delete,		
		Drop		
	40	My SQL: NULL,	Lecture	Assignment 12
		ALTER, Delete,		
		Drop		
	41	JAVA	Lecture/Discussi	
			on	
	42	JAVA	Lecture	Assignment 13
	43	JAVA vs. Perl	Lecture	
	44	Electronic	Lecture	
		Commerce		
	45	Dreamweaver	Lecture	Assignment 14
		I	ı	<u> </u>

<sup>\*</sup>Above are the minimum number of classes to be scheduled for the subjects having classes 5 days per week. For subjects having classes 4 days per week and 3 days per week, the number of lectures are to bereduced i.e. 30 minimum number of classes for 3 days per week subject and 36 minimum number of classes for 4 days per week subject.

# Lesson Plan for the Semester Starting: 16<sup>th</sup> January 2023

Name of the subject: Multimedia

Subject Code: B.Sc 602

Name of the Institution: DAV Institute of Management

Name of the teacher with designation: Dr.Shobha Bhatia/Ass.Prof.

Department: B.Sc Hons. CS, Semester: 6<sup>th</sup>

		Date of Class taken	ass Topic/Chapter Covered		Test/Assignme	
January 2023	1		Introduction of Multimedia, concepts, Features of Multimedia	Activity PPT		
	2		Challenges & Characteristics of Multimedia	PPT		
	3		Requirement and Importance of Multimedia Systems	PPT		
	4		Components of Multimedia, Elements of Multimedia	PPT		
	5		Various categories of Multimedia Devices in detail	PPT		
	6		Applications and uses of Multimedia, Advantages and disadvantages of Multimedia	PPT		
	7		Creation and delivery of Multimedia, stages of multimedia project development	PPT		
	8		Revision & Doubts	PPT		
	9		Multimedia Authoring tools; Types of Authoring Tools; Card and Page-Based Authoring Tools; Icon- Based Authoring Tools;	PPT		
	10		Time-Based Authoring Tools; Object-Oriented 6- Authoring Tools; Types of Multimedia Software's in detail	PPT		
February	11		File formats: audio, video, images, animation, text etc.	PPT		
	12		intelligent multimedia systems, applications	PPT		
	13		presentation devices &user interface	PPT		
	14		digital representation of sounds& formats	PPT		
	15		process of digital sounds	PPT		
	16		digital representation of video & formats	PPT		
	17		Revision & doubts	PPT		
	18		VR orientation & tracking	PPT		
	19		case studies of intelligent multimedia systems	PPT		
	20		compression & types	PPT		
	21		contdd. Compression	PPT		
	22		IMAGE COMPRESSION	PPT		
	23		Dvi technology, time based media representation & delivery	PPT		
	24		speech recognition, brief survey	PPT		
	25		digital video ℑ compression	PPT		
	26		Revision & Doubts			
	27				Test and Assignments	
	28		production &delivery of multimedia	PPT		

	29	Intoduction to vrml, concepts	PPT	
	30	multimedia software enviornment	PPT	
March	31	limitations of workstation o/s	PPT	
	32	multimedia systems services	PPT	
	33	media stream protocol	PPT	
	34	Revision & Doubts	PPT	
	35	multimedia file systems & information representation	PPT	
	36	data models for m/m	PPT	
	37	hypermedia in detail	PPT	
	38	desktop virtual reality, VROS	PPT	
	39	Revision & Doubts	PPT	
	40	distributed VR enviornment systems	PPT	
	41	framework for multimedea systems	PPT	
April 2023	1	Revision & Doubts-Previous year question paper discussions	PPT	
	2	Previous Year Question paper discussion	PPT	
	3	Contdd. Previous Year Question paper discussion		
	4	Lab1		
	5	Lab2		
	6	Lab3		

# Lesson Plan for semester starting w.e.f. 8<sup>th</sup> February,2023

Behavioral & Communication Skills – B.Sc 6th Semester

Paper Code: B.Sc-607

Name of Institute: DAV Institute Of Management, Faridabad

Name of Teacher with designation: Ms. Nidhi Mehra(Guest Faculty)

**Department: B.Sc Hons. CS** 

Mont 1	Clas	Date Of Class Taken	Topic/ Chapter covered	Academic activity	Test/ Assignment	Deviation/if any
April	1		Overview of Subject	Verbal Discussion		
	2		Concept of Group Behavior	Lecture/ Presentation		
	3		Group classification & stages of group development	Lecture/ Presentation		
	4		External conditions imposed in the group, Group member resources	Lecture/ Presentation		
	5		Group Structure & Cohesiveness	Lecture/ Presentation		
	6		Concept of Motivation	Lecture/ Presentation		
	7		Process & Theories	Lecture/		

		Presentation	
8	Theories of	Lecture/	
	Motivation	Presentation	
9	Concept of leadership	Lecture/	
	Concept of leadership	Presentation	
10	Leadership Styles,	Lecture/	
	The Managerial Grid	Presentation	
11	Contingency	Lecture/	
	approach, leadership	Presentation	
	effectiveness	1 resentation	
12	Concept of Power	Lecture/	
12	Concept of 1 ower	Presentation	
13	Sources of Power,	Lecture/	
	Power tactics	Presentation	
14	Power in groups,	Lecture/	
	Politics	Presentation	
15	Implications,	Lecture/	
	Prepositions	Presentation	
16	Concept of	Lecture/	
	Communication	Presentation	
17	Communication	Lecture/	
	Barriers, Process of	Presentation	
	Communication,		
	Importance of		
	Communication		
18	Effective Listening	Lecture/	
		Presentation	
19	Communication	Lecture/	
	effectiveness	Presentation	
20	Management concept	Lecture/	
	in practicing	Presentation	
	communication,		
	Communication		
21	Direction	T / /	
21	Formal Vs. Informal	Lecture/	
	network decision	Presentation	
22	making Group Vs. Individual	Lecture/	
\ \( \alpha \)	1 *	Presentation	
	decision making	r resentation	
 23	Concept of stress	Lecture/	
	management	Presentation	
24	Stratogica of Strato	Lastura	
24	Strategies of Stress	Lecture/ Presentation	
25	Management Fax amail Taxt	Lecture/	
43	Fax, email, Text, Office Letters,	Presentation	
	1	rieschauon	
26	Applications  Comparatives and	Lecture/	
20	Comparatives and Superlatives	Presentation	
	Superiatives	rieschauon	
27	Subject Verb	Lecture/	
	Agreement	Presentation	
<u> </u>	<u> </u>		

	T :		
28	Voice, Reported	Lecture/	
	Speech	Presentation	
29	Tenses	Lecture/	
	Tenses	Presentation	
30	Articles. Tag	Lecture/	
	Questions	Presentation	
31	Mixed Bag Practice of	Lecture/	
	Grammar	Presentation	
32	Paragraph Writing	Lecture/	
		Presentation	
33	Revision & Doubts	Lecture/	
		Presentation	