



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE - 560109

DEPARTMENT OF MECHANICAL ENGINEERING

SESSION: 2022-2023 (ODD SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Dr. P N Jyothi

SUBJECT CODE/TITLE : 18ME56/OPERATIONS MANAGEMENT

SEMESTER/YEAR : V SEM /III YEAR

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Delivery Date
MODULE 1							
1	Introduction, Functions within business organizations	L+D	BB+LCD	1	1	10/10/22	12/10/22
2	The operation management function, Classification of production systems	L+ D	BB+LCD	1	2	11/10/22	13/10/22
3	Productivity, factors affecting productivity.	L+D	BB+LCD	1	3	12/10/22	18/10/22
4	Decision Making: The decision process, characteristics of operations decisions, use of models	L+PS	BB+LCD	1	4	13/10/22	18/10/22
5	Class Activity 1 - Decision Making Process	D	BB	1	-	17/10/22	19/10/22
6	Decision Making Problems related to Uncertainty	L+ D	BB+LCD	1	5	18/10/22	31/10/22
7	Decision Making using Linear Programming	L+PS	BB	1	6	19/10/22	31/10/22
8	Numerical Problems on LPP formation and solving the LPP by Graphical Method	L+PS	BB	1	7	20/10/22	10/11/22
9	Numerical Problems on LPP formation and solving the LPP by Graphical Method	L+PS	BB	1	8	25/10/22	10/11/22
10	Numerical Problems on LPP formation and solving the LPP by Graphical Method	L+PS	BB	1	9	27/10/22	10/11/22
11	Decision Making Break Even Analysis	L+ D	BB	1	10	31/10/22	14/11/22
12	Decision Making Break Even Analysis	L+PS	BB	1	11	2/11/22	16/11/22
13	Decision Making Break Even Analysis	L+PS	BB	1	12	3/11/22	16/11/22
14	Numerical Problems on BEA	L+ PS	BB	1	13	10/11/22	17/11/22


15	Decision Making using Decision tree	L+PS	BB	1	14	14/11/22	18/11/22
16	Decision Making using Decision tree	L+PS	BB	1	15	15/11/22	19/11/22
17	Class Activity 2 – Problem Solving on LPP, BEA and DT	PS	BB	1	-	21/11/22	22/11/22
MODULE 2							
18	Forecasting: Steps in forecasting process,	L	BB+LCD	1	16	22/11/22	24/11/22
19	Approaches to forecasting	L	BB+LCD	1	17	23/11/22	28/11/22
20	Forecasts based on judgment Analysis	L	BB+LCD	1	18	24/11/22	28/11/22
21	Forecasts based on opinion Analysis	L	BB+LCD	1	19	28/11/22	28/11/22
22	Class Activity 3 - Concepts of Forecasting- PPT presentation	D	BB	1	-	29/11/22	29/11/22
23	Numerical Problems -Time Series Method	L	BB	1	20	30/11/22	29/11/22
24	Numerical Problems -Time Series Method	L+PS	BB	1	21	1/12/22	29/11/22
25	Numerical Problems-Method of least Squares	L+PS	BB	1	22	5/12/22	30/11/22
26	Numerical Problems-Method of least Squares	L+PS	BB	1	23	6/12/22	30/11/22
27	Numerical Problems-Regression and correlation Method	L+PS	BB	1	24	7/12/22	30/11/22
28	Numerical Problems-Regression and correlation Method	L+PS	BB	1	25	8/12/22	30/11/22
29	Numerical Problems-Exponential smoothing	L+PS	BB	1	26	15/12/22	1/12/22
30	Numerical Problems-Exponential smoothing			1	27	19/12/22	1/12/22
31	Class Activity 4 - Problem Solving on Forecasting	L	BB	1	-	20/12/22	2/12/22
MODULE 3							
32	Capacity & Location Planning: Importance of capacity decisions, defining and measuring capacity	L	BB+LCD	1	28	2/12/22	5/12/22
33	Determinants of effective capacity, determining capacity requirement	L	BB+LCD	1	29	22/12/22	6/12/22
34	Developing capacity alternatives	L	BB+LCD	1	30	24/12/22	7/12/22
35	Evaluating alternatives	L+PS	BB	1	31	26/12/22	14/12/22
36	Need for location decisions, nature of locations decisions	L+PS	BB	1	32	27/12/22	15/12/22
37	Class Activity 5 - Plant Location-A case study	L	BB	1	-	28/12/22	20/12/22
38	General procedure for making locations decisions.	L+PS	BB	1	33	29/12/22	21/12/22
39	Decisions evaluating locations, facilities layout – need for layout decisions	L+D	BB+LCD	1	34	31/12/22	24/11/22
40	Types of processing	L	BB+LCD	1	35	2/1/23	2/1/23
41	Class Activity 6 - Plant Layout- A case study	L	BB	1	-	3/1/23	3/1/23
MODULE 4							
42	Aggregate Planning & Master Scheduling: Aggregate planning – Nature and scope of aggregate planning	L+D	BB+LCD	1	36	4/1/23	4/1/23

43	Strategies of aggregate planning	L+D	BB+LCD	1	37	5/1/23	5/1/23
44	Techniques for aggregate planning – graphical and charting techniques	L+D	BB+LCD	1	38	9/1/23	9/1/23
45	Numerical Problems	L+PS	BB	1	39	10/1/23	10/1/23
46	Numerical Problems	L+PS	BB	1	40	16/1/23	10/1/23
47	Numerical Problems	L+PS	BB	1	41	17/1/23	10/1/23
48	Class Activity 7- Problem Solving on aggregate planning	L+PS	BB	1	-	23/1/23	12/1/23
49	Mathematical techniques	L+D	BB+LCD	1	42	24/1/23	12/1/23
50	Numerical Problems	L+PS	BB	1	43	24/1/23	13/1/23
51	The master production schedule, Master scheduling process	L+D	BB+LCD	1	44	23/1/23	13/1/23
52	Master scheduling Methods	L+D	BB+LCD	1	45	23/1/23	14/1/23
53	Class Activity 8 - Preparation of MPS- Chart Preparation	L	BB	1	-	25/1/23	14/1/23
MODULE 5							
54	Material Requirement Planning (MRP): Dependent versus independent demand, an overview of MRP – MRP inputs and outputs	L+D	BB+LCD	1	46	25/1/23	14/1/23
55	MRP processing, ERP capacity requirement planning	L+D	BB+LCD	1	47	27/1/23	14/1/23
56	Benefits and limitations of MRP	L+D	BB+LCD	1	48	27/1/23	
57	Material Requirement Planning (MRP) problems	L	BB	1	49	pp1	16/1/23
58	Material Requirement Planning (MRP) problems	L	BB	1	50		6
59	Class Activity 9 - A case study on MRP	L	BB	1	-	presentation	18/1/23
60	Purchasing and Supply Chain Management (SCM): Introduction, Importance of purchasing and SCM	L+D	BB+LCD	1	51	28/1/23	
61	The pro Process, Concept of tenders,	L+D	BB+LCD	1	52	28/1/23	
62	Approaches to SCM, Vendor development	L+D	BB+LCD	1	53	28/1/23	
63	Class Activity 10- Related to SCM for different Products	L	BB	1	-	28/1/23	

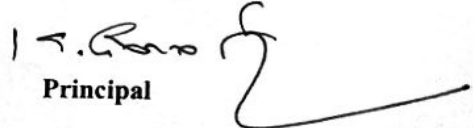
Total No of Lecturer Hours=53

Total No of Activity & Tutorial Hours= 10

	Mode of Assignment and instructions*	Date
Assignment 1 15M(5M each)	Class Activity-1- Decision Making Process-Chart Preparation Class Activity-2 - Problem Solving on LPP, BEA and DT Class Activity-3- Forecasting- PPT presentation	27/10/21
Assignment 2 15M(5M each)	Class Activity-4- Problem Solving on forecasting Class Activity-5- Plant Location-A case study Class Activity-6- Plant Layout- A case study	30/11/21
Assignment 3 20M(5M each)	Class Activity-7- Problem Solving on aggregate planning Class Activity-8- Preparation of MPS- Chart Preparation Class Activity-9- A case study on MRP Class Activity-10- SCM for different Products- A case study	15/12/21


Course In charge


Head of the Department


Principal



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU - 560109
DEPARTMENT OF MANAGEMENT STUDIES
 SESSION: 2022-2023 (ODD SEMESTER)
LESSON PLAN

NAME OF THE STAFF : S RAJA MOHAN

COURSE CODE/TITLE : 20MBA301-EMERGING EXPONENTIAL TECHNOLOGIES

SEMESTER/YEAR : III SEMESTER / II YEAR

ACADEMIC YEAR : 2022-2023

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Execution Date
1	Module-1 :Introduction to EMERGING TECHNOLOGIES :	L+D	WB+LCD	1	1	28.11.2022	29/11/2022
2	Historical background of the industrial revolution	L+D	WB+LCD	1	2	29.11.2022	30/11/2022
3	Introduction to fourth industrial revolution- IR 4.0	L+D	WB+LCD	1	3	30.11.2022	1/12/2022
4	Role of data for emerging technologies	L+D	WB+LCD	1	4	1.12.2022	5/12/2022
5	Enabling devices and Networks for engineering technologies	L+D	WB+LCD	1	5	5.12.2022	6/12/2022
6	Human to Machine interaction	L+D	WB+LCD	1	6	6.12.2022	6/12/2022
7	Future trends in Emerging Technologies	L+D	WB+LCD	1	7	7.12.2022	7/12/2022
8	Module -2 DATA SCIENCE: Introduction	L+D	WB+LCD	1	8	8.12.2022	8/12/2022
9	Definition of Data and Information	L+D	WB+LCD	1	9	10.12.2022	19/12/2022
10	Data types and Representation	L+D	WB+LCD	1	10	12.12.2022	20/12/2022
11	Data value chain, Data Acquisition	L+D	WB+LCD	1	11	13.12.2022	21/12/2022
12	Data Analysis	L+D	WB+LCD	1	12	14.12.2022	23/12/2022
13	Data Curating, Data Storage	L+D	WB+LCD	1	13	15.12/2022	24/12/2022
14	Data usage	L+D	WB+LCD	1	14	19.12.2022	26/12/2022
15	Basic concepts of Big Data	L+D	WB+LCD	1	15	20.12.2022	27/12/2022
16	Module -3 ARTIFICIAL INTELLIGENCE	L+D	WB+LCD	1	16	21.12.2022	28/12/2022
17	Concept of AI	L+D	WB+LCD	1	17	22.12.2022	31/12/2022
18	History of AI	L+D	WB+LCD	1	18	24.12.2022	2/1/2023
19	Types of AI	L+D	WB+LCD	1	19	26.12.2022	14/1/2023

20	Application of AI in Agriculture	L+D	WB+LCD	1	20	27.12..2022	16/1/23
21	Application of AI in Health	L+D	WB+LCD	1	21	28.12.2022	15/1/23
22	AI in Emerging Market	L+D	WB+LCD	1	22	29.12.2022	18/1/23
23	AI in Education	L+D	WB+LCD	1	23	31.12..2022	19/1/23
24	AI tools and plat forms	L+D	WB+LCD	1	24	29.12.2022	23/1/23
25	AI tools and plat forms	L+D	WB+LCD	1	25	31.12.2022	24/1/23
26	Module -4 INTERNET OF THINGS	L+D	WB+LCD	1	26	2.1.2023	25/1/23
27	Overview of IOT	L+D	WB+LCD	1	27	3.1.2023	28/1/23
28	History of IOT	L+D	WB+LCD	1	28	4.1.2023	21/2/23
29	Advantages of IOT	L+D	WB+LCD	1	29	5.1.2023	11/2/23
30	IOT working Process	L+D	WB+LCD	1	30	9.1.2023	13/2/23
31	Architecture of IOT	L+D	WB+LCD	1	31	10.1.2023	14/2/23
32	Devices and Network	L+D	WB+LCD	1	32	11.1.2023	15/2/23
33	Applications of IOT at Smart Home	L+D	WB+LCD	1	33	12.1.2023	16/2/23
34	Applications of IOT smart grid	L+D	WB+LCD	1	34	19.1.2023	20/2/23
35	IOT Smart City	L+D	WB+LCD	1	35	23.1..2023	21/2/23
36	Wearable Devices	L+D	WB+LCD	1	36	24.12023	22/2/23
37	Smarty farming	L+D	WB+LCD	1	37	25.1.2023	23/2/23
38	IOT tools and Platforms	L+D	WB+LCD	1	38	28.1.2023	25/2/23
39	Sample application with hands on activity	L+D	WB+LCD	1	39	30.1.2023	27/2/23
40	Module -5 AUGMENTED REALITY AND VIRTUAL REALITY	L+D	WB+LCD	1	40	31.1.2023	27/2/23
41	Introduction to AR	L+D	WB+LCD	1	41	.1.2.2023	28/2/23
42	Introduction to VR	L+D	WB+LCD	1	42	2.2..2023	28/2/23
43	AR vs MR	L+D	WB+LCD	1	43	6.2..2023	11/3/23
44	Architecture of AR systems	L+D	WB+LCD	1	44	.7.2.2023	21/3/23
45	Application of AR systems	L+D	WB+LCD	1	45	8.2.2023	21/3/23
46	Education, Medical, Entertainment	L+D	WB+LCD	1	46	9.2.2023	21/3/23
47	Workshop oriented Hands Demo	L+D	WB+LCD	1	47	13.2.2023	31/3/23
48	Workshop	L+D	WB+LCD	1	48	14.2.2023	31/3/23
49	Module-6 ETHICS, PROFESSIONALISM AND OTHER EMERGING TECHNOLOGIES	L+D	WB+LCD	1	49	15.2.2023	6/4/23
50	Technology and Ethics, Digital Privacy, accountability and trust	L+D	WB+LCD	1	50	16.2.2023	10/4/23
51	Block chain Technology Cloud and Quantum computing, automatic computing	L+D	WB+LCD	1	51	23.2.2023	4/4/23

52	Computer vision, cyber security, 3D printing	L+D	WB+LCD	1	52	25.2.2023	7/3/23
53	Case study	L+D	WB+LCD	1	53	2.3.2023	7/3/23
54	Case study	L+D	WB+LCD	1	54	6.3.2023	8/3/23
55	Revision	L+D	WB+LCD	1	55	7.3.2023	8/3/23
56	Revision	L+D	WB+LCD	1	56	8.3.2023	

Total No. of Lecture Hours = 52


Total No. of Case study Hours = 2

Total No. of Revision Hours = 2

	Mode of Assignment and Instructions	Date
Assignment 1	Written –essays on Module 1 and 2	5/1/2023
Assignment 2	Written essays on Module 3 and 4	2/2/2023
Assignment 3	Written –essays on Module 4 and 6	6/3/2023


RAJA MOHAN S

Course In charge


Dr. Shekar H S

Head of the Department
Professor & HOD-MBA,
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Bengaluru - 560 109


Dr. K. Rama Narasimha

Principal



K. S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE - 560109

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SESSION: 2022-2023(ODD SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Dr.MANU D K

COURSE CODE/TITLE : 18EC53/PRINCIPLES OF COMMUNICATION SYSTEMS

SEMESTER/YEAR : V /III

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Execution Date
MODULE 1							
1	AMPLITUDE MODULATION: Introduction, Amplitude Modulation:	L	BB	1	1	10-10-2022	10/10/22
2	Time & Frequency Domain description	L, PS	BB	1	2	11-10-2022	11/10/22
3	Switching modulator, Envelop detector.	L	BB	1	3	13-10-2022	13/10/22
4	DOUBLE SIDE BAND-SUPPRESSED CARRIER MODULATION: Time and Frequency Domain description, Ring modulator	L	BB	1	4	14-10-2022	14/10/22
5	Coherent detection, Costas Receiver	L	BB	1	5	15-10-2022	17/10/22
6	Quadrature Carrier Multiplexing	L	BB	1	6	17-10-2022	18/10/22
7	SINGLE SIDE-BAND AND VESTIGIAL SIDEBAND METHODS OF MODULATION: SSB Modulation, VSB Modulation,	L, PS	BB	1	7	18-10-2022	20/10/22
8	Frequency Translation	L,	BB	1	8	20-10-2022	21/10/22

9	Frequency- Division Multiplexing,	L	BB	1	9	21-10-2022	28/10/22
10	Theme Example: VSB Transmission of Analog and Digital Television.	L	BB	1	10	25-10-2022	10/11/22
	Assignment 1: Assignment Questions and Answer				11	27-10-2022	10/11/22
11	ANGLE MODULATION: Basic definitions, Frequency Modulation	L	BB	1	12	27-10-2022	10/11/22
12	Narrow Band FM, Wide Band FM, and Transmission bandwidth of FM Signals.	L, PS	BB	1	13	28-10-2022	15/11/22
13	Generation of FM Signals	L	BB	1	14	31-10-2022	18/11/22
14	Demodulation of FM Signal	L	BB	1	15	03-11-2022	17/11/22
15	FM Stereo Multiplexing	L	BB	1	16	04-11-2022	18/11/2022
16	Phase-Locked Loop:	L	BB	1	17	07-11-2022	19/11/2022
17	Nonlinear model of PLL	L	BB	1	18	08-11-2022	20/11/22
18	Linear model of PLL	L	BB	1	19	10-11-2022	29/11/2022
19	Nonlinear Effects in FM Systems.	L, PS	BB	1	20	12-11-2022	29/11/2022
20	The Superheterodyne Receive	L	BB	1	21	17-11-2022	01/12/2022
21	NOISE - Shot Noise, Thermal noise, White Noise	L	BB	1	22	18-11-2022	02/12/2022
22	Noise Equivalent Bandwidth NOISE IN ANALOG MODULATION: Introduction, Receiver Model	L	BB	1	23	21-11-2022	05/12/22
23	Noise in DSB-SC receivers.	L	BB	1	24	22-11-2022	06/12/22
24	Noise in AM receivers	L, PS	BB	1	25	24-11-2022	08/12/22

25	Threshold effect	L	BB	1	26	25-11-2022	09/12/22
26	Capture effect	L	BB	1	27	28-11-2022	12/12/22
27	Noise in FM receivers	L, PS	BB	1	28	29-11-2022	13/12/22
28	FM threshold effect	L	BB	1	29	01-12-2022	16/12/22
29	FM threshold reduction	L	BB	1	30	02-12-2022	19/12/22
30	Pre-emphasis and De-emphasis in FM	L	BB	1	31	05-12-2022	22/12/22
	Assignment 2: Assignment Questions and Answer				32	05-12-2022	26/12/22
31	SAMPLING AND QUANTIZATION: Introduction	L	BB	1	33	06-12-2022	27/12/22
32	Why Digitize Analog Sources?	L	BB	1	34	08-12-2022	02/01/23
33	The Low pass Sampling process	L, PS	BB	1	35	09-12-2022	05/01/23
34	Pulse Amplitude Modulation	L	BB	1	36	10-12-2022	05/01/23
35	Time Division Multiplexing	L	BB	1	37	12-12-2022	06/01/23
36	Time Division Multiplexing	L	BB	1	38	13-12-2022	06/01/23
37	Pulse-Position Modulation	L, PS	BB	1	39	15-12-2022	09/01/23
38	Pulse-Position Modulation	L, PS	BB	1	40	16-12-2022	09/01/23
39	Generation of PPM Waves	L	BB	1	41	22-12-2022	12/01/23
40	Detection of PPM Waves	L	BB	1	42	23-12-2022	13/01/23
41	SAMPLING AND QUANTIZATION (Contd): The Quantization Random Process,	L	BB	1	43	26-12-2022	16/01/23

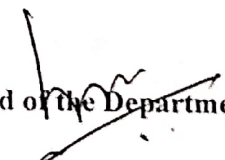
42	Quantization Noise, Pulse-Code Modulation:	L	BB	1	44	27-12-2022	18/01/23
43	Sampling, Quantization	L	BB	1	45	29-12-2022	18/01/23
44	Encoding	L	BB	1	46	30-12-2022	18/01/23
45	Regeneration	L	BB	1	47	31-12-2022	19/01/23
46	Decoding	L, PS	BB	1	48	02-01-2023	19/01/23
47	Filtering	L	BB	1	49	03-01-2023	20/01/23
48	Multiplexing	L	BB	1	50	05-01-2023	20/01/23
49	Delta Modulation	L, PS	BB	1	51	06-01-2023	23/01/2023
50	Application examples (a) Video + MPEG (b) Vocoders	L	BB	1	52	09-01-2023	24/01/23
	Assignment 3: Drawing/Demonstration:				53	10-01-2023	10/01/23
51	Revision	L	BB	1	54	12-01-2023	27/01/23
52	Revision	L	BB	1	55	13-01-2023	
53	Revision	L	BB	1	56	16-01-2023	
54	Revision	L	BB	1	57	17-01-2023	
55	Revision	L	BB	1	58	23-01-2023	
56	Revision	L	BB	1	59	24-01-2023	
57	Revision	L	BB	1	60	27-01-2023	


Total No. of Lecture Hours: 57

Total No. of Tutorial Hours: 0

	Mode of Assignment and Instructions	Date
Assignment 1	Assignment Questions and Answer: A total of 10 Assignment questions will be given from CO1 and CO2 to submit the descriptive answer in assignment book.	27-10-2022
Assignment 2	Assignment Questions and Answer: A total of 10 Assignment questions will be given from CO2 and CO3 to submit the descriptive answer in assignment book.	05-12-2022
Assignment 3	Drawing/Demonstration: Students are made into groups, and asked them to draw the relevant concepts of pre-assigned topic (CO4 and CO5) on A4 sheets or explain the working principle using PPT slides. Finally submit the report on the work they have carried out.	10-01-2023


Course In charge


Head of the Department
Professor & Head
Dept. of Electronics & Communication Engineering
K S School of Engineering & Management
Bangalore, 560 109


Principal
Dr. K. RAMA NARASIMHA
Principal/Director
K S School of Engineering and Management
Bangalore - 560 109



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU - 560109

DEPARTMENT OF CIVIL ENGINEERING

SESSION: 2022-2023 (ODD SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Dr. VIJAYALAKSHMI AKELLA/ Mrs. AMRUTHA DHIRAJ

COURSE CODE/TITLE : 21CV33/ STRENGTH OF MATERIALS

SEMESTER/YEAR : III / II

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Delivery Date
MODULE 1							
1	Simple Stresses and Strain: Introduction, Properties of Materials, Stress, Strain, Hooke's law, Poisson's Ratio	L	BB	1	1	03/11/22	3/11/22
2	Stress - Strain Diagram for structural steel, Principles of superposition, Total elongation of tapering bars of circular and rectangular cross sections.	T	BB	1	2	08/11/22	8/11/22
3	Composite section, Volumetric strain, expression for volumetric strain, Elastic constants, relationship among elastic constants (No Numerical), Thermal stress and strains	L	BB	1	3	10/11/22	10/11/22
4	Tutorials	T	BB	0	3	12/11/22	10/11/22
5	Practical: Dimensionality of bricks, Water absorption, Initial rate of absorption	P	D	2	5	03/11/22	10/11/22
6	Introduction, Stress components on inclined planes	T	BB	1	6	15/11/22	12/11/22
7	General two-dimensional stress system, Principal planes and stresses,	L	BB	1	7	17/11/22	14/11/22
8	Maximum shear stresses and their planes (shear planes). Compound stress using Mohr's circle method.	T	BB	1	8	22/11/22	14/11/22



9	Practical: Specific gravity of coarse and fine aggregate.	P	D	2	10	17/11/22	17/11/22
MODULE 2							
10	Bending moment and shear force diagrams in beams: Definition of shear force and bending moment, Sign convention	L	BB	1	11	03/11/22	12/11/22
11	Relationship between loading, shear force and bending moment, Shear force and bending moment equations	T	BB	1	12	07/11/22	17/11/22
12	development of Shear Force Diagram(SFD) and Bending Moment Diagram (BMD) with salient values for cantilever, simply supported and overhanging beams for point loads, UDL(Uniformly Distributed Load), UVL(Uniformly Varying Load) and Couple.	L	BB	1	13	10/11/22	21/11/22
13	Practical: Fineness modulus of Fine and Coarse aggregate,	P	D	2	15	10/11/22	24/11/22
14	Development of Shear Force Diagram(SFD) and Bending Moment Diagram (BMD) with salient values for cantilever, simply supported and overhanging beams for point loads, UDL(Uniformly Distributed Load), UVL(Uniformly Varying Load) and Couple.	T	BB	1	16	14/11/22	21/11/22
15	Development of Shear Force Diagram(SFD) and Bending Moment Diagram (BMD) with salient values for cantilever, simply supported and overhanging beams for point loads, UDL(Uniformly Distributed Load), UVL(Uniformly Varying Load) and Couple.	L	BB	1	17	17/11/22	22/11/22
16	Development of Shear Force Diagram(SFD) and Bending Moment Diagram (BMD) with salient values for cantilever, simply supported and overhanging beams for point loads, UDL(Uniformly Distributed Load), UVL(Uniformly Varying Load) and Couple.	T	BB	1	18	21/11/22	23/11/22
17	Practical: Compressive strength tests on building blocks (brick, solid blocks and hollow blocks).	P	D	2	20	24/11/22	1/12/22
MODULE 3							
18	Bending stress in beams: Introduction -Bending stress in beam, Pure bending, Assumptions in simple bending theory	L	BB	1	21	01/12/22	24/11/22

19	derivation of Simple bending equation (Bernoulli's equation),	T	BB	1	22	05/12/22	28/11
	modulus of rupture, section modulus, Flexural rigidity, Problems	L	BB	1	23	08/12/22	28/11
20	Tutorial	T	BB	0	23	10/12/22	1/12
21	Practical: Tension test on Mild steel and HYSD bars	P	D	2	25	15/12/22	8/12
22	Derivation of Shear stress intensity equations,	T	BB	1	26	12/12/22	8/12
23	Derivation of Expressions of the shear stress intensity for rectangular, triangular and circular cross sections of the beams	L	BB	1	27	15/12/22	8/12
24	Problems on calculation of the shear stress intensities at various critical levels of T, I and Hollow rectangular cross sections of the beam.	L	BB	1	28	29/12/22	12/12
25	Practical: Compression test on HYSD, Cast iron.	P	D	2	30	22/12/22	15/12
MODULE 4							
26	Torsion: Twisting moment in shafts, simple torque theory, derivation of torsion equation	L	BB	1	31	22/11/22	15/12
27	Torsion: Twisting moment in shafts, simple torque theory, derivation of torsion equation, torsional rigidity, polar modulus	L	BB	1	32	24/11/22	15/12
28	Shear stress variation across solid circular and hollow circular sections, Problems	T	BB	1	33	06/12/22	22/12
29	Practical: Bending Test on Wood under two-point loading	P	D	2	35	01/12/22	22/12
30	Thin cylinders: Introduction: Longitudinal, circumferential (hoop) stress in thin cylinders. Expressions for longitudinal and circumferential stresses. Efficiency of longitudinal and circumferential joints. Problems on estimation of change in length, diameter and volume when the thin cylinder subjected to internal fluid pressure.	L	BB	1	36	08/12/22	24/12
31	Concept of Thick cylinders Lamé's equations applicable to thick cylinders with usual notations, calculation of longitudinal, circumferential and radial stresses – simple numerical examples.	L	BB	1	37	12/12/22	26/12

32	Sketching the variation of radial stress (pressure) and circumferential stress across the wall of thick cylinder.	T	BB	1	38	13/12/22	27/12
33	Practical: Shear Test on Mild steel – single and double shear	P	D	2	40	08/12/22	29/12
MODULE 5							
34	Elastic stability of columns: Introduction – Short and long columns, Euler's theory on columns, Effective length, slenderness ratio, radii of gyration, buckling load, Assumptions	L	BB	1	41	15/12/22	29/12/22
35	Derivations of Euler's Buckling load for different boundary conditions,	L	BB	1	42	20/12/22	2/1/23 3,5/1/23
36	Limitations of Euler's theory, Rankine's formula and related problems.	L	BB	1	43	22/12/22	12/1/23
37	Practical: Impact test on Mild Steel (Charpy)	P	D	2	45	29/12/22	12/1/23
38	Deflection of determinate Beams: Introduction, Elastic curve –Derivation of differential equation of flexure, Sign convention	L	BB	1	46	22/12/22	16/1/23 19/1/23, 19/1
39	Slope and deflection using Macaulay's method for statically determinate beams subjected to various vertical loads, moment, couple and their combinations. Numerical problems.	L	BB	1	47	27/12/22	19/1/23 23/1/23
40	Slope and deflection using Macaulay's method for statically determinate beams subjected to various vertical loads, moment, couple and their combinations. Numerical problems.	L	BB	1	48	29/12/22	29/1/23 30/1/23 31/1/23
41	Practical: Impact test on Mild Steel (Izod)	P	D	2	50	05/01/23	19/1/23
42	Tutorial	L	BB	0	50	31/12/22	7/2/23
43	Revision	L	BB	0	50	05/01/23	13/2
44	Revision	L	BB	0	50	09/01/23	14/2
45	Revision	L	BB	0	50	10/01/23	16/2
46	Revision	L	BB	0	50	12/01/23	20/2
47	Revision (lab)	P	D	0	50	12/01/23	11/2/23

48	Revision	L	BB	0	50	12/01/23	13/2
49	Revision	L	BB	0	50	16/01/23	14/2
50	Revision	L	BB	0	50	17/01/23	16/2
51	Revision	L	BB	0	50	19/01/23	21/2
52	Revision (lab)	P	D	0	50	19/01/23	16/2/23
53	Revision	L	BB	0	50	19/01/23	27/2
54	Revision	L	BB	0	50	23/01/23	28/2
55	Revision	L	BB	0	50	24/01/23	9/3
56	Revision (lab)	L	BB	0	50	30/01/23	21/3/23
57	Revision	L	BB	0	50	31/01/23	9/3/23
58	Revision	L	BB	0	50	07/02/23	13/3
59	Revision	L	BB	0	50	11/02/23	20/3
60	Revision (lab)	L	BB	0	50	11/02/23	23/3
61	Revision	L	BB	0	50	11/02/23	23/3

	Week	Remarks
Assignment 1	(4 th week)	Written (24/11/22)
Assignment 2	(9 th week)	Written (29/12/22)

Total No. of Lecture Hours = 20;

Total No. of Tutorial Hours = 10+2;

Total No. of Practical Hours = 20;

Total No. of Revision Hours = 22

[Signature]
Course In charge

[Signature]
Head of Dept

[Signature]
IQAC Coordinator

[Signature]
Principal

Professor & Head
Dept. of Civil Engineering
K.S. Group of Institutions
K.S. School of Engineering & Management
Bangalore-560 062.

Principal / Director
K.S. School of Engineering & Management
Bangalore-560 062





KSSSEM

K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU - 560109

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SESSION: 2022-2023 (ODD SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Mrs. Amitha S

COURSE CODE/TITLE : 18CS734 / User Interface Design

SEMESTER/SEC/YEAR : VII/A/2022

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Engaged Date
MODULE 1: The User Interface							
1	Introduction	L+D	BB+LCD	1	1	20/09/2022	20/09/22
2	Overview of UID	L+D	BB+LCD	1	2	22/09/2022	21/09/22
3	The importance of user interface.	L+D	BB+LCD	1	3	23/09/2022	23/09/22
4	The importance of user interface	L+D	BB+LCD	1	4	27/09/2022	29/09/22
5	Defining the user interface	L+D	BB+LCD	1	5	29/09/2022	30/09/22
6	The importance of Good design	L+D	BB+LCD	1	6	30/09/2022	06/10/22
7	Characteristics of graphical and web user interfaces.	L+D	BB+LCD	1	7	06/10/2022	07/10/22
8	Principles of user interface Design	L+D	BB+LCD	1	8	07/10/2022	07/10/22
9	Tutorial	L+D	BB+LCD	0	0	07/10/2022	07/10/22
MODULE 2: The User Interface Design process							
10	Obstacles, Usability.	L+D	BB+LCD	1	9	11/10/2022	11/10/22
11	Human characteristics in Design	L+D	BB+LCD	1	10	13/10/2022	13/10/22
12	Human Interaction speeds	L+D	BB+LCD	1	11	14/10/2022	14/10/22
13	Business functions-Business definition and requirement analysis	L+D	BB+LCD	1	12	15/10/2022	15/10/22

14	Assignment 1: Written Assignment	Offline	Assignment book	0	0	15/10/2022	15/10
15	Continuation of requirement analysis	L+D	BB+LCD	1	13	20/10/2022	20/10/22
16	Basic business functions	L+D	BB+LCD	1	14	21/10/2022	21/10/22
17	Design standards.	L+D	BB+LCD	1	15	25/10/2022	25/10/22
18	Continuation of Design standards.	L+D	BB+LCD	1	16	03/11/2022	10/11/22
19	Tutorial	L+D	BB+LCD	0	0	03/11/2022	10/11/22

MODULE 3: System menus and navigation schemes

20	System menus and navigation schemes	L+D	BB+LCD	1	17	04/11/2022	12/11/22
21	Structures of menus	L+D	BB+LCD	1	19	08/11/2022	15/11/22
22	Functions of menus	L+D	BB+LCD	1	19	10/11/2022	17/11/22
23	Contents of menus	L+D	BB+LCD	1	20	12/11/2022	18/11/22
24	Formatting of menus	L+D	BB+LCD	1	21	15/11/2022	24/11/22
25	Phrasing the menu	L+D	BB+LCD	1	22	17/11/2022	25/11/22
26	Selecting menu choices	L+D	BB+LCD	1	23	18/11/2022	29/11/22
27	Navigating menus, Kinds of graphical menus.	L+D	BB+LCD	1	24	18/11/2022	01/12/22
28	Assignment 2: Written Assignment	Offline	Assignment book	0	0	18/11/2022	02/12/22
29	Tutorial	L+D	BB+LCD	0	0	18/11/2022	02/12/22

MODULE 4: Windows

30	Windows – Characteristics	L+D	BB+LCD	1	25	24/11/2022	06/12/22
31	Components of window	L+D	BB+LCD	1	26	25/11/2022	08/12/22
32	Window presentation styles	L+D	BB+LCD	1	27	29/11/2022	09/12/22
33	Types of window	L+D	BB+LCD	1	28	1/12/2022	08/12/22
34	Window management,	L+D	BB+LCD	1	29	02/12/2022	09/12/22
35	Organizing window functions, Window operations,	L+D	BB+LCD	1	30	06/12/2022	10/12/22
36	Web systems,	L+D	BB+LCD	1	31	08/12/2022	11/12/22
37	Characteristics of device based controls.	L+D	BB+LCD	1	32	09/12/2022	16/12/22
38	Tutorial	L+D	BB+LCD	0	0	09/12/2022	16/12/22

MODULE 5: Screen Based Control

39	Screen based controls	L+D	BB+LCD	1	33	10/12/2022	16/12/22
40	Operable control	L+D	BB+LCD	1	34	13/12/2022	20/12/22
41	Text control	L+D	BB+LCD	1	35	15/12/2022	22/12/22
42	Selection control	L+D	BB+LCD	1	36	15/12/2022	23/12/22
43	Custom control	L+D	BB+LCD	1	37	16/12/2022	24/12/22
44	Presentation control	L+D	BB+LCD	1	38	16/12/2022	25/12/22
45	Windows Tests-prototypes	L+D	BB+LCD	1	39	20/12/2022	29/12/22
46	Kinds of tests.	L+D	BB+LCD	1	40	20/12/2022	27/12/22
47	Assignment 3- Written Assignment	Offline	Assignment book	0	0	20/12/2022	29/12/22
48	Tutorial	L+D	BB+LCD	0	0	27/12/2022	29/12/22
49	Revision	L+D	BB+LCD	0	40	27/12/2022	29/12/22

Total No. of Lecture Hours = 40


Total No. of Revision Hours = 01

Total No. of Tutorial Hours = 05

	Mode of Assignment and instructions	Date
Assignment 1	<p>Written Assignment -Module 1 and Module 2</p> <ul style="list-style-type: none"> The importance of user interface Characteristics of graphical and web user interfaces. Principles of user interface Design Human characteristics in Design Human Interaction speeds <p>Note : students will be given with Assignments questions students need to write the answers in assignment book.</p>	15/10/2022
Assignment 2	<p>Written Assignment -Module 2 and Module 3</p> <ul style="list-style-type: none"> Business functions-Business definition and requirement analysis Design standards, Structures of menus, Functions of menus Phrasing the menu 	18/11/2022

	<ul style="list-style-type: none"> • Selecting menu choices • Navigating menus, Kinds of graphical menus. <p>Note : students will be given with Assignments questions students need to write the answers in assignment book.</p>	
Assignment 3	<p>Written Assignment – Module 4 and Module 5</p> <ul style="list-style-type: none"> • Components of window • Window presentation styles • Organizing window functions, Window operations • Characteristics of device and screen based controls. • Operable control & Text control • Selection control ,Custom control &Presentation control • Windows Tests-prototypes <p>Note: students will be given with Assignments questions students need to write the answers in assignment book.</p>	20/12/2022


Course in charge


Head of the Department
HOD
Dept. of Computer Science & Engineering
K. S. School of Engineering & Management
Bangalore-560 062


Principal
Dr. K. RAMA NARASIMHA
Principal/Director
K S School of Engineering and Management
Bengaluru - 560 109



LESSON PLAN

NAME OF THE STAFF : Dr C VASUDEV

COURSE CODE/TITLE : BMATS101/ MATHEMATICS FOR COMPUTER SCIENCE AND ENGINEERING STREAM-I

SEMESTER/YEAR : I SEM/I

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Delivery Date
MODULE 1							
1	Polar curves - angle between the radius vector and tangent	L+D	BLACK BOARD	2	2	12/12/2022 13/12/2022	12/12/2022
2	Angle between two curves.	L+D	BB	1	3	14/12/2022	13/12/2022
3	Pedal Equations-Problems	L+D	BB	1	4	15/12/2022	14/12/2022 15/12/2022
4	Curvature and radius of curvature- Cartesian, Parametric forms	L+D	BB	2	6	19/12/2022 20/12/2022	19/12/2022
5	Curvature and radius of curvature- Polar, Pedal forms.	L+D,	BB	2	8	21/12/2022 22/12/2022	20/12/2022 21/12/2022
6	Tutorials: Self Study- Center and circle of curvature, Evolutes and Involutives.	L+D	BB	2	-	24/12/2022 26/12/2022	22/12/2022 22/12/2022
7	Tutorials: Applications : Computer graphics, Image processing	L+D	BB	2	-	27/12/2022 28/12/2022	24/12/2022 26/12/2022
8	Practicals: 2D plots for Cartesian and polar curve	L+D	BB	2	-	12/01/2023/ 16/01/2023 And 19/12/2022 23/12/2022	28/12/2022 12/1/23 16/1/23
9	Practicals: Angle between two curves and radius of curvature.	L+D	BB	2	-	26/12/2022/3 0/12/2022 And	23/12/22 26/12/22

						31/12/2023 6/01/2023	31/12/22 6/1/23
MODULE 2							
10	Taylor's and Maclaurin's series expansions for one variable	L+D	BB	2	10	29/12/2022 31/12/2022	28/12/22 29/12/22
11	Indeterminate forms - L'Hospital's rule.	L+D	BB	1	11	02/01/2023	21/12/22
12	Assignment-1	---			28/12/2023	28/12/22
13	Partial differentiation; Total derivatives-differentiation of composite functions.	L+D	BB	2	13	03/01/2023 04/01/2023	02/1/23 03/1/23
14	Jacobian	L+D	BB	1	14	05/01/2023	04/1/23
15	Maxima and minima for a function of two Variables	L+D	BB	2	16	09/01/2023 10/01/2023	05/1/23 09/1/23
16	Tutorials: Problem Solving Self Study- Euler's Theorem and Problems, Method of Lagrange undetermined multipliers with Single Constraint	L+D	BB	2	-	11/01/2023 12/01/2023	10/1/23 11/1/23
17	Tutorials: Problem Solving Applications: Series expansion in computer programming, Computing errors and approximations	L+D	BB	2	-	19/01/2023 20/01/2023	12/1/23 19/1/23
18	Practical: Maclaurin's series expansion, L'Hospitals rule, Partial differentiation	L+D	BB, D	2	-	02/01/2023/1 3/01/2023 and 09/01/2023/ 20/01/2023	20/1/23 02/1/23 3/1/23
19	Practical: Jacobians	L+D	BB, D	1	-	23/01/2023/0 3/02/2023	9/1/23 23/1/23
MODULE 3							

20	Linear Algebra-Rank of a matrix-Echelon form	L+D	BB	1	17	23/01/2023	03/2/23
21	Consistency of System of linear equations	L+D	BB	1	18	24/01/2023	23/1/23
22	Solution of system of linear equations- Gauss elimination method	L+D	BB	1	19	25/01/2023	24/1/23
23	Gauss Jordan method	L+D	BB	1	20	28/01/2023	25/1/23
24	Approximate solution by Gauss Seidal method	L+D	BB	2	22	30/01/2023 31/01/2023	28/1/23 30/1/23
25	Eigen values and Eigen vectors method	L+D	BB	1	23	01/02/2023	31/1/23
26	Rayleigh's power method	L+D	BB	1	24	02/02/2023	01/2/23
27	Tutorials:Problem solving Self Study- Solution of System of equations by Gauss-Jacobi iterative method. Inverse of a square matrix by Cayley-Hmilton theorem.	L+D	BB	2	-	07/02/2023 08/02/2023	02/02/23 07/02/23
28	Tutorials:Applications	L+D	BB	2	-	09/02/2023 10/02/2023	08/02/23 09/02/23
29	Practical: Consistency of System of linear equations, Gauss Seidal method	L+D	BB	1	-	30/01/2023/ 10/02/2023	10/02/23 30/01/23
30	Practical: Rayleigh's power method	L+D	BB	1	-	13/02/2023/ 17/02/2023	13/02/23 17/2/23
31	Assignment-2				-	3/2/2023	3/2/23
MODULE 4							
32	Exact Differential Equations	L+D	BB	1	25	11/02/2023	3/2/23
33	Reducible to exact differential equations.	L+D	BB	1	26	13/02/2023	11/2/23
34	Bernoulli's Differential equations	L+D	BB	1	27	14/02/2023	13/2/23
35	Applications of ODE's-orthogonal trajectories.	L+D	BB	1	28	15/02/2023	14/2/23
36	L-R & C-R circuits. Problems	L+D	BB	1	29	16/02/2023	15/2/23
37	Nonlinear differential equations: Introduction to general and singular solutions ; Solvable for p only;	L+D	BB	1	30	23/02/2023	16/2/23 23/2/23

38	Clairaut's and reducible to Clairaut's equations only	L+D	BB	2	32	27/02/2023 28/02/2023	23/2/23 25/2/23
39	Tutorials: Problem Solving Self Study- Applications of ODE's -L-R circuits, Applications of ODE's- Solvable for X and Y	L+D	BB	2	-	01/03/2023/ 02/03/2023	28/2/23 01/03/23
40	Tutorials: Applications of ordinary differential equations: Rate of Growth or Decay, Conduction of heat,	L+D	BB	2	-	06/03/2023/ 07/03/2023	02/3/23 06/03/23
41	Practicals:Solutions of first order differential equations and plotting the curve	L+D	BB	1	-	27/02/2023/0 3/03/2023	07/3/23 27/02/23
42	Practicals:Solutions of first order differential equations and plotting the curve	L+D	BB	1	-	06/03/2023/ 10/03/2023	03/3/23 06/3/23
MODULE 5							
43	Introduction to Congruences ,Finding GCD using Euclid's Algorithm Congruences,	L+D	BB	1	33	08/03/2023	10/03/23 08/3/23
44	The Remainder theorem	L+D	BB	1	34	09/03/2023	08/3/23
45	Solving Polynomials			1	35	11/03/2023	9/3/23
46	Linear Diophantine Equation,	L+D	BB	1	36	13/03/2023	11/3/23 13/3/23
47	System of Linear Congruences, Solving linear congruences $ax \equiv b(\text{mod } m)$			1	37	14/03/2023	13/3/23 14/3/23
48	Euler's Theorem, Wilson Theorem and Fermat's little theorem.	L+D	BB	2	39	15/03/2023 16/03/2023	15/3/23 16/3/23
49	Applications of Congruences-RSA algorithm.			1	40	20/03/2023	15/3/23
50	Tutorials:Self Study- Divisibility, GCD, Properties of Prime Numbers, Fundamental theorem of Arithmetic, Applications: Cryptography, encoding and decoding, RSA applications in public key encryption.	L+D	BB	2	-	21/03/2023 27/03/2023	16/3/23 17/3/23
51	Practical: Finding GCD using Euclid's Algorithm	L+D	BB	1	-	11/03/2023/1 7/03/2023	13/03/23
52	Practical: Solve linear congruence of the form $ax \equiv b(\text{mod } m)$	L+D	BB	1	-	13/03/2023/ 17/03/2023	17/3/2023

	Mode of Assignments and Instructions	Date
Assignment 1	Problem solving(Written Assignment)	28/12/2023
Assignment 2	Problem solving and Model question paper solutions	3/02/2023

Total No. of Lecture Hours = 40

Total No. of Tutorial Hours = 18

Total no. of Practical Classes=13



Course In charge



Head of the Department

Dr. C. VASUDEV

Professor & HOD

Department of Applied Science

K.S. School of Engineering & Management

Bangalore - 560 109



Principal

Dr. K. RAMA NARASIMHA

Principal/Director

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K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU - 560109

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

SESSION: 2022-2023 (ODD SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Ms. Madhusmita Mishra

SUBJECT CODE/TITLE : 21CS32/DATA STRUCTURES AND APPLICATIONS

SEMESTER/ SEC/ YEAR : III/II

Sl. No	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Delivery Date
MODULE 1							
1	Introduction: Data Structures, Classifications (Primitive & Non-Primitive), Data structure Operations.	L+D	BB	1	1	31/10/2022	2/11/22
2	Review of Arrays. Structures: Array of structures, Self-Referential Structures and Unions.	L+ D	BB	1	2	31/10/2022	2/11/22
3	Pointers and Dynamic Memory Allocation Functions.	L+ D	BB	1	3	2/11/2022	3/11/22
4	Representation of Linear Arrays in Memory and Dynamically allocated arrays	L+D	BB	1	4	4/11/2022	4/11/22
5	Array Operations: Traversing, inserting, deleting, searching, and sorting. Multidimensional arrays.	L+ D	BB	1	5	7/11/2022	4/11/22
6	Polynomials and Sparse Matrices.	L+D	BB	1	6	9/11/2022	7/11/22
7	Strings: Basic Terminology, Storing, Operations	L+ D	BB	1	7	14/11/2022	8/11/22

8	Pattern Matching algorithm, Programming examples.	L+ D	BB	1	8	14/11/2022	9/11/22
9	Practical: 1.Design, Develop and Implement a menu driven Program in C for the following Array Operations a. Creating an Array of N Integer Elements b. Display of Array Elements with Suitable Headings c. Exit. 2. Design, Develop and Implement a menu driven Program in C for the following Array operations a. Inserting an Element (ELEM) at a given valid Position (POS) b. Deleting an Element at a given valid Position (POS) c. Display of Array Elements d. Exit.	Practical	D	3	3	A3-2/11/2022 A2-3/11/2022 A1-4/11/2022 A3-9/11/2022 A2-10/11/2022 A1-18/11/2022	16/11/22 17/11/22 18/11/22 16/11/22 18/11/22 18/11/22
10	Tutorial	L+ D	BB	2	-	16/11/2022 18/11/2022	10/11/22
MODULE 2							
11	Stacks: Definition, Stack Operations, Array Representation of Stacks	L+D	BB	1	9	21/11/2022	14/11/22
12	Stacks using Dynamic Arrays, Stack Applications: Polish notation, Infix to postfix conversion	L+ D	BB	1	10	21/11/2022	14/11/22
13	Evaluation of postfix expression.	L+ D	BB	1	11	23/11/2022	16/11/22
14	Recursion -Factorial, GCD, Fibonacci Sequence, Tower of Hanoi, Ackerman's function	L+D	BB	1	12	25/11/2022	21/11/22
15	Queues: Definition, Array Representation, Queue Operations,	L+ D	BB	1	13	26/11/2022	21/11/22
16	Circular Queues.	L+D	BB	1	14	2/12/2022	23/11/22
17	Circular queues using Dynamic arrays	L+ D	BB	1	15	2/12/2022	25/11/22
18	Dequeues, Priority Queues	L+ D	BB	1	16	5/12/2022	26/11/22

19	<p>Practical: 1. Design, Develop and Implement a menu driven Program in C for the following operations on STACK of Integers. a. Push an Element on to Stack b. Pop an Element from Stack c. Demonstrate Overflow and Underflow situations on Stack d. Display the status of Stack e. Exit.</p> <p>2. a. Design, Develop and Implement a Program in C for the following Stack Applications a. Evaluation of Suffix expression with single digit operands and operators: +, -, *, /, %, ^ b. Solving Tower of Hanoi problem with n disks.</p>	Practical	D	3	6	A3-16/11/2022 A2-17/11/2022 A1-25/11/2022 A3-23/11/2022 A2-24/11/2022 A1-2/12/2022	23/11/22 24/11/22 25/11/22 25/11/22 24/12/22 2/12/22
20	Tutorial	L+D	BB	5	-	5/12/2022 7/12/2022 9/12/2022 12/12/2022	28/11/22 28/11/22 30/11/22 2/12/22
MODULE 3							
21	Linked Lists: Definition, Classification of linked lists in Memory. Representation of linked lists in Memory.	L+D	BB	1	17	14/12/2022	9/12/22
22	Linked list operations: Traversing, Searching, Insertion	L+D	BB	1	18	16/12/2022	12/12/22
23	Deletion, Sorting and Concatenation operations.	L+D	BB	1	19	19/12/2022	12/12/22
24	Doubly Linked lists,	L+D	BB	1	20	19/12/2022	14/12/22
25	Circular linked lists	L+D	BB	1	21	21/12/2022	16/12/22
26	Header linked lists, Linked Stacks and Queues.	L+D	BB	1	22	23/12/2022	19/12/22
27	Applications of Linked lists – Polynomials,	L+D	BB	1	23	24/12/2022	24/12/22

28	Sparse matrix representation. Programming Examples	L+ D	BB	1	24	26/12/2022	29/12/22
29	<p>Practical: 1. Singly Linked List (SLL) of Integer Data a. Create a SLL stack of N integer. b. Display of SLL c. Linear search. Create a SLL queue of N Students Data Concatenation of two SLL of integers. 2. Design, Develop and Implement a menu driven Program in C for the following operations on Doubly Linked List (DLL) of Professor Data with the fields: ID, Name, Branch, Area of specialization a. Create a DLL stack of N Professor's Data. b. Create a DLL queue of N Professor's Data. Display the status of DLL and count the number of nodes in it.</p>	Practical	D	3	9	A3-26/11/2022 7/12/2022 A2-1/12/2022 15/12/2022 A1-16/12/2022 23/12/2022 A3-14/12/2022 A2-22/12/2022 A1-30/12/2022	30/11/22 14/12/22 8/12/22 15/12/22 9/12/22 16/12/22 24/12/22 22/12/22 23/12/22
30	Tutorial	L+D	BB	3	-	26/12/2022 28/12/2022 30/12/2022	30/12/22 31/12/22 31/12/22
MODULE 4							
31	Trees: Terminology, Binary Trees, Properties of Binary trees	L+D	BB+LCD	1	25	31/12/2022	4/01/23
32	Array and linked Representation of Binary Trees	L+ D	BB+LCD	1	26	31/12/2022	6/01/23
33	Binary Tree Traversals - Inorder, Postorder, Preorder	L+ D	BB+LCD	1	27	6/1/2023	13/01/23
34	Additional Binary tree operations.	L+D	BB+LCD	1	28	9/1/2023	14/01/23
35	Threaded binary trees	L+ D	BB+LCD	1	29	9/1/2023	16/01/23
36	Binary Search Trees – Definition, Insertion, Deletion Traversal, Searching	L+D	BB+LCD	1	30	11/1/2023	17/01/23
37	Application of Trees-Evaluation of Expression	L+ D	BB+LCD	1	31	13/1/2023	23/01/23

38	Application of Trees-Evaluation of Expression	L+D	BB+LCD	1	32	13/1/2023	
39	<p>Practical: 1. Given an array of elements, construct a complete binary tree from this array in level order fashion. That is, elements from left in the array will be filled in the tree level wise starting from level 0. Ex: Input : arr[] = {1, 2, 3, 4, 5, 6}.</p> <p>2. Design, Develop and Implement a menu driven Program in C for the following operations on Binary Search Tree (BST) of Integers a. Create a BST of N Integers b. Traverse the BST in Inorder, Preorder and Post Order</p>	Practical	D	3	12	A3-21/12/2022 A2-29/12/2022 A1-06/01/2023 A3-24/12/2022 A2-05/01/2023 A1-13/1/2023	28/12/22 29/12/22 30/12/22 41/01/23 57/01/23 6/01/23
40	Tutorial	L+D	BB	1	-	16/1/2023	28/01/23
MODULE 5							
41	Trees 2: AVL tree, Red-black tree	L+D	BB+LCD	1	33	16/1/2023	27/01/23
42	Splay tree, B-tree.	L+D	BB+LCD	1	34	18/1/2023	28/01/23
43	Graphs: Definitions, Terminologies	L+D	BB+LCD	1	35	20/1/2023	30/01/23
44	Matrix and Adjacency List Representation of Graphs, Elementary Graph operations	L+D	BB+LCD	1	36	23/1/2023	1/02/23
45	Traversal methods: Breadth First Search and Depth First Search	L+D	BB+LCD	1	37	23/1/2023	3/02/23
46	Hashing: Hash Table organizations,	L+D	BB+LCD	1	38	25/1/2023	6/02/23
47	Hashing Functions	L+D	BB+LCD	1	39	27/1/2023	8/02/23
48	Static and Dynamic Hashing	L+D	BB+LCD	1	40	28/1/2023	10/02/23
49	<p>Practical: 1. Design, Develop and implement a program in C for the following operations on Graph (G) of cities a. Create a Graph of N cities using Adjacency Matrix. b. Print all the nodes reachable from a given starting node in a diagraph using DFS/BFS method.</p>	Practical		3	15	A3-28/12/2022 A2-12/1/2023 A1-20/1/2023 A3-11/1/2023	28/01/23 12/01/23 27/01/23 1/02/23