SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGAREDDY DISTRICT, T.S.-501506

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

LESSON PLAN

Academic Year	:	2021-2022
Class & Semester	:	II-I
Name of the Faculty member	:	G.SWARNALATHA
Name of the subject	:	ANALOG ELECTRONICS

Course objectives:

Course Objectives:

- To introduce components such as diodes, BJTs and FETs their switching characteristics, applications
- Learn the concepts of high frequency analysis of transistors.
- To give understanding of various types of basic and feedback amplifier circuits such as small signal, cascaded, large signal and tuned amplifiers.
- To introduce the basic building blocks of linear integrated circuits
- To introduce the concepts of waveform generation and introduce some special function ICs.

Course Outcomes:

- Know the characteristics, utilization of various components..
- Understand the biasing techniques
- Design and analyze various rectifiers, small signal amplifier circuits
- Design sinusoidal and non-sinusoidal oscillators
- A thorough understanding, functioning of OP-AMP, designs OP-AMP based circuits with linear integrated circuits.

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulative periods
1	I	21-10-2021	**Diode Circuit**: Introduction	1	1
2		23-10-2021	P-N junction diode, I-V characteristics of a diode	1	2
3		25-10-2021	Review of half-wave rectifier	1	3
4		26-10-2021	Review of full-wave rectifier	1	4
5		29-10-2021	Clamping circuits	1	5
6		02-11-2021	Clipping circuits	1	6
7		05-11-2021	Input output characteristics of BJT in CB, CE, CC configurations	1	7
8		06-11-2021	biasing circuits	1	8
9		08-11-2021	Load line analysis	1	9
10		09-11-2021	Common-Emitter amplifiers	1	10
11		11-11-2021	Common-Base amplifiers	1	11
12		12-11-2021	Common Collector amplifiers	1	12
13		15-11-2021	Small signal equivalent circuits	1	13
14		18-11-2021	Problems	1	14
15		20-11-2021	Class Test-1	1	15

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulative periods
17		25-11-2021	**MOSFET Circuits:** Introduction	1	16
18		29-11-2021	MOSFET structure and I-V characteristics	1	17
19		30-11-2021	MOSFET as a switch	1	18
20		02-12-2021	Small signal equivalent circuits	1	19
21		04-12-2021	Small-signal model gain, input and output impedances	1	20
22	II	06-12-2021	Common-Source amplifier	1	21
23		06-12-2021	Common-Gate amplifier	1	22
24		07-12-2021	Common-Drain amplifier	1	23
25		08-12-2021	Transconductance	1	24
26		16-12-2021	High frequency equivalent circuit	1	25
27		20-12-2021	Test	1	26
28		21-12-2021	**Multi-Stage and Power Amplifiers: Introduction**	1	27
29		22-12-2021	Direct coupled multi-stage amplifiers	1	28
30		24-12-2021	RC Coupled multi-stage amplifiers	1	29
31		29-12-2021	Problems	1	30
32	III	03-01-2022	Differential Amplifiers		31
33		04-01-2022	Power amplifiers-classification	1	32
34		05-01-2022	Class A	1	33
35		06-01-2022	Class B	1	34
36		17-01-2022	Class C	1	35
37		19-01-2022	Problems	1	36
38		20-01-2022	**Feedback Amplifiers:** Concepts of feedback – Classification of feedback amplifiers	1	37
39		21-01-2022	General characteristics of Negative feedback amplifiers	1	38
40		22-01-2022	Effect of Feedback on Amplifier characteristics	1	39
41		24-01-2022	Voltage series Feedback configuration	1	40
42		25-01-2022	Voltage shunt Feedback configuration	1	41
43		28-01-2022	Current series Feedback configuration	1	42
44	IV	31-01-2022	Current shunt Feedback configuration	1	43
45		01-02-2022	**Oscillators:** Condition for Oscillations	1	44
46		02-02-2022	RC type Oscillators-RC phase shift Oscillator	1	45
		03-02-2022	Wien-bridge Oscillator	1	46
		04-02-2022	LC type Oscillators –Generalized analysis of LC Oscillators	1	47
		05-02-2022	Hartley Oscillators	1	48
		06-02-2022	Colpitts Oscillators	1	49
47		07-02-2022	Operational Amplifiers: Ideal op-amp	1	50
48		08-02-2022	Output offset voltage, input bias current	1	51
49		08-02-2022	Input offset current, slew rate, gain bandwidth product	1	52
50	V	16-02-2022	Inverting and non-inverting amplifier	1	53
51		17-02-2022	Differentiator and Integrator	1	54
		18-02-2022	Square- Wave Generators.	1	55
52		21-02-2022	Triangular-Wave Generators.	1	56

Faculty

H.O.D

Principal

SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGAREDDY DISTRICT, T.S.-501506

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

LESSON PLAN

Academic Year : **2021-2022**
Class & Semester : **B.Tech II YEAR –II SEMSTER**
Name of the Faculty member : **SRISHAILAM.K**
Name of the subject : **ELECTRICAL MACHINES-II**

S .No	DATE	Topic(s)	No of Periods	Cumulative no. of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources T1, R1, OR1, OR2…
		Unit-I				
1	21-03-22	Constructional details of cage and wound rotor machines	1	1	Chalk and Talk	T1
2	23-03-22	Production of a rotating magnetic field	1	2	Chalk and Talk	T1
3	24-03-22	Principle of operation	1	3	Chalk and Talk	T1
4	26-03-22	Rotor EMF and rotor frequency	1	4	Chalk and Talk	R1
5	31-03-22	Rotor reactance, rotor current and Power factor at standstill and during operation.	2	6	Chalk and Talk	R1
		Unit-II				
6	01-04-22	Rotor power input, rotor copper loss and mechanical power developed and their inter relation	2	8	Chalk and Talk	T1,T2
7	07-04-22	Torque equation-deduction from torque equation	1	9	Chalk and Talk	T1,T2
8	08-04-22	Expressions for maximum torque and starting torque	2	11	Chalk and Talk	T1,T2

9	16-04-22	Torque slip characteristic	1	12	Chalk and Talk	T1
10	18-04-22	Equivalent circuit - phasor diagram	2	14	Chalk and Talk	R2
11	19-04-22	Crawling and cogging	1	15	Chalk and Talk	R2
12	21-04-22	No-load Test and Blocked rotor test –Predetermination of performance	2	17	Chalk and Talk	T2
13	23-04-22	Methods of starting and starting current and Torque calculations	2	19	PPT	T2,R3
14	25-04-22	Change of voltage, change of frequency, voltage/frequency, injection of an EMF into rotor circuit	2	21	PPT	R3
15	26-04-22	Induction generator-principle of operation	1	22	Chalk and Talk	T3
		Unit-III				
16	30-05-22	Constructional Features of round rotor and salient pole machines	1	23	Chalk and Talk	T1
17	10-05-22	Armature windings	2	25	Chalk and Talk	T3
18	13-05-22	Integral slot and fractional slot windings	2	27	Chalk and Talk	T2
19	30-05-22	Distributed and concentrated windings	2	29	Chalk and Talk	T2,T3
20	31-05-22	Distribution, pitch and winding factors, E.M.F Equation	2	31	Chalk and Talk	R2
21	02-06-22	Harmonics in generated e.m.f	1	32	Chalk and Talk	R3
22	03-06-22	Suppression of harmonics	1	33	Chalk and Talk	T2
23	04-06-22	Armature reaction	2	35	Chalk and Talk	T1
24	06-06-22	Leakage reactance – synchronous reactance and impedance	2	37	Chalk and Talk	T1
25	07-06-22	Experimental determination - phasor diagram – load characteristics	2	39	Chalk and Talk	T1
26	08-06-22	Regulation by synchronous impedance method	2	41	Chalk and Talk	T1
27	09-06-22	M.M.F. method, Z.P.F. method and A.S.A. methods	3	44	Chalk and Talk	T1,R1
28	10-06-22	Salient pole alternators – two reaction analysis – experimental determination of X_d and X_q (Slip	2	46	Chalk and Talk	T1,R2

		test)				
29	11-06-22	Phasor diagrams – Regulation of salient pole alternators.	2	48	**Chalk and Talk**	T2
Unit-IV						
30	13-06-22	Synchronizing alternators with infinite bus bars	2	50	**Chalk and Talk**	T1,R2
31	13-06-22	Synchronizing power torque	2	52	**Chalk and Talk**	T2,R3
32	14-06-22	Parallel operation and load sharing	2	54	**Chalk and Talk**	T1
33	16-06-22	Effect of change of excitation and mechanical power input	2	56	**Chalk and Talk**	T2
34	22-06-22	Analysis of short circuit current wave form – determination of sub-transient	2	58	**Chalk and Talk**	T2,R2
35	23-06-22	Transient and steady state reactance's	2	60	**Chalk and Talk**	T1
36	27-06-22	Synchronous Motors-Theory of operation – phasor diagram	2	62	**Chalk and Talk**	T1
37	04-07-22	Variation of current and power factor with excitation	2	64	**Chalk and Talk**	T1
38	06-07-22	Synchronous condenser	1	65	**Chalk and Talk**	T2
39	08-07-22	Mathematical analysis for power developed	1	66	**Chalk and Talk**	T1,R2
40	18-07-22	Hunting and its suppression	1	67	**Chalk and Talk**	T2
41	19-07-22	Methods of starting – synchronous induction motor.	2	69	**Chalk and Talk**	T1
Unit-V						
42	26-07-22	Single phase induction motor	1	70	**Chalk and Talk**	T1,R2
43	01-08-22	Constructional features	1	71	**Chalk and Talk**	T1,R1
44	02-08-22	Double revolving field theory	1	72	**Chalk and Talk**	T1,R3
45	04-08-22	Split-phase motors	1	73	**Chalk and Talk**	R3

46	08-08-21	Shaded pole motor.	1	74	**Chalk and Talk**	T2

a. Text Books:

1. P. S. Bimbhra, "Electrical Machinery", Khanna Publishers, 2011.

2. M. G. Say, "Performance and design of AC machines", CBS Publishers, 2002.

b. Reference Books:

1. A. E. Fitzgerald and C. Kingsley, "Electric Machinery", McGraw Hill Education, 2013.

2. I. J. Nagrath and D. P. Kothari, "Electric Machines", McGraw Hill Education, 2010.

3. A. S. Langsdorf, "Alternating current machines", McGraw Hill Education, 1984.

Faculty **H.O.D.** **Principal**

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

LESSON PLAN

Academic Year	:	2021-2022
Class & Semester	:	B.Tech-EEE-II-II-R18
Name of the Faculty member	:	G.PRIYANKA
Name of the subject	:	DIGITAL ELECTRONICS

Course objectives:

- To learn basic techniques for the design of digital circuits and fundamental concepts used in the design of digital systems.
- To understand common forms of number representation in digital electronic circuits and to be able to convert between different representations.
- To implement simple logical operations using combinational logic circuits
- To design combinational logic circuits, sequential logic circuits.
- To impart to student the concepts of sequential circuits, enabling them to analyze sequential systems in terms of state machines.
- To implement synchronous state machines using flip-flops.

Course outcomes: At the end of this course, students will demonstrate the ability to

- Understand working of logic families and logic gates.
- Design and implement Combinational and Sequential logic circuits.
- Understand the process of Analog to Digital conversion and Digital to Analog conversion.
- Be able to use PLDs to implement the given logical problem.

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulatie periods
1	I	21/03/22	**Fundamentals of Digital Systems and Logic Families:** Digital signals, digital circuits	1	1
2		22/03/22	AND, OR, NOT, NAND, NOR and Exclusive-ORoperations	1	2
3		24/03/22	Boolean algebra	1	3
4		25/03/22	Examples of IC gates	1	4
5		26/03/22	Number systems-binary, signed binary, octal hexadecimal number	1	5
6		28/03/22	Binary arithmetic	1	6
7		29/03/22	One's and two's complements arithmetic	1	7
8		31/03/22	Codes- error detecting and correcting codes	1	8
9		01/04/22	Characteristics of digital lCs	1	9
10		04/04/22	Digital logic families-TTL,Schottky TTL and CMOS logic	1	10
11		07/04/22	Interfacing CMOS and TTL, Tri-state logic	1	11
12	II	08/04/22	**Combinational Digital Circuits:** Standard representation for logic functions	1	12
13		09/04/22	K-map representation, and simplification of logic functions using K-map	1	13
14		11/04/22	Minimization of logical functions, Don't care conditions	1	14
15		12/04/22	Multiplexer, De-Multiplexer/Decoders	1	15
16		13/04/22	Adders, Subtractors	1	16
17		16/04/22	BCD arithmetic	1	17
18		18/04/22	Carry look ahead adder	1	18
19		19/04/22	Serial ladder	1	19

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulatie periods
20		22/04/22	ALU, elementary ALU design, popular MSI chips	1	20
21		23/04/22	Digital comparator	1	21
22		25/04/22	Parity checker/generator	1	22
23		26/04/22	Code converters	1	23
24		29/04/22	Priority encoders, decoders/drivers for display devices	1	24
25		30/04/22	Q-M method of function realization.	1	25
26	III	02/05/22	**Sequential Circuits and Systems:** A 1-bit memory, the circuit properties of Bi-stable latch	1	26
27		06/05/22	The clocked SR flip flop, J, K, T and D types flip-flops	1	27
28		07/05/22	Applications of flip-flops	1	28
29		09/05/22	Shift registers	1	29
30		10/05/22	Applications of shift registers	1	30
31		13/05/22	Serial to parallel converter, parallel to serial converter	1	31
32		14/05/22	Ring counter, sequence generator, ripple (Asynchronous) counters	1	32
33		06/06/22	Synchronous counters, counters design using flip flops	1	33
34		07/06/22	Special counter IC's	1	34
35		10/06/22	Asynchronous sequential counters	1	35
36		11/06/22	Applications of counters	1	36
37	IV	13/06/22	**A/D and D/A Converters:** Digital to analog converters-weighted resistor/converter	1	37
38		14/06/22	R-2R Ladder D/A converter, specifications for D/A converters	1	38
39		17/06/22	Examples of D/A converter lCs	1	39
40		18/06/22	Sample and hold circuit	1	40
41		20/06/22 21/06/22	Analog to digital converters: quantization and encoding	1	41
42		24/06/22	Parallel comparator A/D converter	1	42
43		25/06/22	Successive approximation A/D converter	1	43
44		27/06/22	Counting A/D converter	1	44
45		28/06/22	Dual slope A/D converter	1	45
46		01/07/22	A/D converter using voltage to frequency and voltage to time conversion	1	46
47		02/07/22	Specifications of A/D converters	1	47
48		04/07/22	Example of A/D converter ICs	1	48
49	V	05/07/22	**Semiconductor Memories and Programmable Logic Devices:** Memory organization and operation	1	49
50		08/07/22	Expanding memory size	1	50
51		09/07/22	Classification and characteristics of memories	1	51
52		11/07/22	Sequential memory, read only memory (ROM)	1	52
53		12/07/22	Read and write memory(RAM)	1	53
54		15/07/22	Content addressable memory (CAM)	1	54
55		16/07/22	Charge de coupled device memory (CCD)	1	55
56		18/07/22	Commonly used memory chips	1	56
57		19/07/22	ROM as a PLD	1	57
58		23/07/22	Programmable logic array	1	58
59		26/07/22	Programmable array logic	1	59
60		29/07/22	Complex Programmable logic devices (CPLDS), Field Programmable Gate Array (FPGA)	1	60

Faculty HOD Principal

Hill Education, 1997.

SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGA REDDY DISTRICT- T.S. – 501506

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJECT: CONTROL SYSTEM **ACADEMIC YEAR: 2021-2022**

Faculty Name: T.Ravichandra **YEAR: II-II SEM(R18)**

Lesson Plan

S. No	Date	Name of the Topic	No of hours	Method of Teaching	Text books Referred
1	21/03/2022	**Unit –I: Introduction to control problem:** Concepts of Control Systems- Open Loop and closed loop control systems and their differences	1	Chalk & Talk	T1,T4
2	23/03/2022	Different examples of control system	1	Chalk & Talk	T1,T4
3	24/03/2022	Classification of control systems	1	Chalk & Talk	T1,T4
4	25/03/2022	Feed-Back Characteristics and Effects of feedback.	1	Chalk & Talk	T1,T4
5	26/03/2022	Mathematical models – Translational and Rotational mechanical systems	1	Chalk & Talk	T1,T4
6	28/03/2022	Related problems	1	Chalk & Talk	T1,T4
7	30/03/2022	Mathematical models – Electrical systems	1	Chalk & Talk	T1,T4
8	31/03/2022	Related problems	1	Chalk & Talk	T1,T4
9	01/04/2022	Transfer Function of DC Servo motor - AC Servo motor	1	Chalk & Talk	T1,T4
10	04/04/2022	Synchro transmitter and Receiver	1	Chalk & Talk	T1,T4
11	06/04/2022	Block diagram representation of systems considering electrical systems as examples	1	Chalk & Talk	T1,T4
12	07/04/2022	Block diagram algebra and related problems	1	Chalk & Talk	T1,T4
13	08/04/2022	Industrial control Examples	1	Chalk & Talk	T1,T4
14	11/04/2022	**Unit- II: Time Response Analysis of Standard Test signals** Time response of first and second order system for standard test inputs	1	Chalk & Talk	T1,T2
15	13/04/2022	Response of second order system for different types of systems (undamped, under damped, critically damped and over damped cases)	1	Chalk & Talk	T1,T2
16	16/04/2022	Time domain specifications – Steady state response	1	Chalk & Talk	T1,T2
17	18/04/2022	Steady state errors and error constant	1	Chalk & Talk	T1,T2
18	20/04/2022	Effects of proportional derivative, proportional integral systems	1	Chalk & Talk	T1,T2
19	21/04/2022	related problems	1	Chalk & Talk	T1,T2
20	22/04/2022	The concept of stability – Routh's stability criterion	1	Chalk & Talk	T1,T2
21	23/04/2022	qualitative stability and conditional stability	1	Chalk & Talk	T1,T2
22	25/04/2022	Limitations of Routh's stability	1	Chalk & Talk	T1,T2
23	27/04/2022	related problems	1	Chalk & Talk	T1,T2
24	28/04/2022	Root Locus Technique:The root locus concept	1	Chalk & Talk	T1,T2

25	29/04/2022	Related Problems	1	Chalk & Talk	T1,T2
26	30/04/2022	**Unit-III: Frequency Response Analysis:** Introduction of Frequency Response Analysis	1	Chalk & Talk	T1,T2,T4
27	02/05/2022	Bode diagrams-Introduction	1	Chalk & Talk	T1,T2,T4
28	04/05/2022	Phase margin and Gain margin-Stability	1	Chalk & Talk	T1,T2,T4
29	05/05/2022	Bode Plots related problems.	1	Chalk & Talk	T1,T2,T4
30	06/05/2022	university question paper discussion	1	Chalk & Talk	T1,T2,T4
31	07/05/2022	Introduction of Polar plots and related problems	1	Chalk & Talk	T1,T2.T4
32	09/05/2022	university question paper discussion	1	Chalk & Talk	T1,T2,T4
33	11/05/2022	Introduction to Nyquist Plot	1	Chalk & Talk	T1,T2,T4
34	12/05/2022	Problems on Nyquist Plots	1	Chalk & Talk	T1,T2,T4
35	13/05/2022	Effects of adding poles and zeros to G(s)H(s) on the shape of the Nyquist diagrams.	1	Chalk & Talk	T1,T2,T4
36	14/05/2022	university question paper discussion	1	Chalk & Talk	T1,T2,T4
37	06/06/2022	**Unit-IV: Introduction to controller Design:** Introduction to all controllers	1	Chalk & Talk	T1,T2
38	08/06/2022	Introduction to lag compensation Design using Bode-plot method	1	Chalk & Talk	T1,T2
39	09/06/2022	Related problems	1	Chalk & Talk	T1,T2
40	10/06/2022	Introduction to lag compensation Design using Root-Loci method	1	Chalk & Talk	T1,T2
41	11/06/2022	Related problems	1	Chalk & Talk	T1,T2
42	13/06/2022	Introduction to lead compensation Design using Bode-plot method	1	Chalk & Talk	T1,T2
42	15/06/2022	Related problems	1	Chalk & Talk	T1,T2
43	16/06/2022	Introduction to lead compensation Design using Root-Loci method	1	Chalk & Talk	T1,T2
44	17/06/2022	Related problems	1	Chalk & Talk	T1,T2
45	18/06/2022	Introduction to lag- lead compensation Design using Bode-plot method	1	Chalk & Talk	T1,T2
46	20/06/2022	Related problems	1	Chalk & Talk	T1,T2
47	22/06/2022	Introduction to lag- lead compensation Design using Root-Loci method	1	Chalk & Talk	T1,T2
48	23/06/2022	Related problems	1	Chalk & Talk	T1,T2
49	24/06/2022	PI,PD and PID controllers	1	Chalk & Talk	T1,T2
50	25/06/2022	Design of PI,PD and PID controllers using Bode techniue	1	Chalk & Talk	T1,T2
51	27/06/2022	Related problems	1	Chalk & Talk	T1,T2
52	29/06/2022	Design of PI,PD and PID controllers using Root locus techniue	1	Chalk & Talk	T1,T2
53	30/06/2022	Related problems	1	Chalk & Talk	T1,T2
54	01/07/2022	**Unit-V:State variable Analysis and concepts of state variables:** Concepts of state, state variables and state model	1	Chalk & Talk	T1,T3,T4
55	02/07/2022	derivation of state models from block diagrams	1	Chalk & Talk	T1,T3,T4
56	04/07/2022	Diagonalization of state matrix	1	Chalk & Talk	T1,T3,T4
57	06/07/2022	Eigen values and stability Analysis	1	Chalk & Talk	T1,T3,T4
58	07/07/2022	Concept of controllability and related problems	1	Chalk & Talk	T1,T3,T4
59	08/07/2022	Concept of observability and related problems	1	Chalk & Talk	T1,T3,T4

60	09/07/2022	Pole-placement by state feedback	1	Chalk & Talk	T1,T3,T4
61	11/07/2022	State-space models of linear discrete-time systems	1	Chalk & Talk	T1,T3,T4
62	13/07/2022	Stability of linear discrete-timesystems.	1	Chalk & Talk	T1,T3,T4
		Total Number of periods	**62**		
63	16/07/2022	UNIT-I (Important Questions Practice)	2	Chalk & Talk	T1,T4
64	20/07/2022	UNIT – II(Important Questions Practice)	2	Chalk & Talk	T1,T2
65	22/07/2022	UNIT – III(Important Questions Practice)	2	Chalk & Talk	T1,T2,T4
66	25/07/2022	UNIT – IV(Important Questions Practice)	2	Chalk & Talk	T1,T2
67	28/07/2022	UNIT – V(Important Questions Practice)	2	Chalk & Talk	T1,T3,T4

TEXTBOOKS:

1. M.Gopal,"ControlSystems:PrinciplesandDesign",McGrawHillEducation,1997.
2. B.C.Kuo,"AutomaticControlSystem",PrenticeHall,1995.

REFERENCEBOOKS:

3.K.Ogata,"ModernControlEngineering",PrenticeHall,1991.
4. I.J.NagrathandM.Gopal,"ControlSystemsEngineering",NewAgeInternational,2009

Faculty HOD Principal

SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGAREDDY DISTRICT, T.S.-501506

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

LESSON PLAN

Academic Year : **2021-2022**
Class & Semester : **B.Tech III YEAR-II SEMSTER**
Name of the Faculty member : **SRISHAILAM.K**
Name of the subject : **POWER SYSTEM OPERATION AND CNTROL**

Sr.No	DATE	Topic(s)	No of Periods	Cumulative no. of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources T1, R1, OR1, OR2...
		Unit-I				
1	03/03/22	Introduction, Bus classification	1	1	Chalk and Talk	T1
2	04/03/22	Nodal admittance matrix	1	2	Chalk and Talk	T1
3	07/03/22	Y BUS formation	1	3	Chalk and Talk	T1
4	08/03/22	Load flow equations. Iterative methods	1	4	Chalk and Talk	R1
5	10/03/22	Gauss Method algorithm	1	5	Chalk and Talk	R1
6	11/03/22	Gauss Seidel Method Algorithm ,problem	1	6	Chalk and Talk	R1
7	14/03/22	Gauss Seidel Method problem	1	7	Chalk and Talk	T1,R1
8	15/03/22	Newton-Raphson Method	1	8	Chalk and Talk	T1,R1
9	17/03/22	Newton-Raphson Method problems	1	9	Chalk and Talk	T1,R1
10	21/03/22	Newton-Raphson Method problems	1	10	Chalk and Talk	T2

11	22/03/22	Fast Decoupled method	1	11	**Chalk and Talk**	T2
12	24/03/22	Merits and demerits of the Gauss Seidel Method, Newton-Raphson Method, Fast Decoupled method	1	12	**Chalk and Talk**	T2
13	25/03/22	Revision of all methods	1	13	**Chalk and Talk**	--
		Unit-II				
14	28/03/22	Introduction to Economic Operation of Power Systems	1	14	**Chalk and Talk**	T1,T2
15	29/03/22	Input and output characteristics	1	15	**Chalk and Talk**	T1,T2
16	31/03/22	Optimal power generation allocation neglecting losses	1	16	**Chalk and Talk**	T1,T2
17	01/04/22	Problems on Optimal power generation allocation neglecting losses	1	17	**Chalk and Talk**	T2
18	04/04/22	Problems on Optimal power generation allocation neglecting losses	1	18	**Chalk and Talk**	R2
19	06/04/22	Optimal power generation allocation including line losses	1	19	**Chalk and Talk**	R2
20	07/04/22	Problems on Optimal power generation allocation including line losses	1	20	**Chalk and Talk**	T2
21	08/04/22	Transmission loss as a function of plant generation,	1	21	**Chalk and Talk**	T2,R3
22	11/04/22	Calculation of loss coefficients	1	22	**Chalk and Talk**	R3
23	12/04/22	Distribution of load between plants	1	23	**Chalk and Talk**	T3
24	13/04/22	Problems on Distribution of load between plant	1	24	**Chalk and Talk**	T3
		Unit-III				

Unit-III						
25	18/04/22	Load Frequency Control Introduction	1	25	**Chalk and Talk**	T1
26	19/04/22	load frequency problem	1	26	**Chalk and Talk**	T3
27	21/04/22	Megawatt frequency (or P-f) control channel	1	27	**Chalk and Talk**	T2
28	22/04/22	MVAR voltages (or Q-V) control channel	1	28	**Chalk and Talk**	T2,T3
29	23/04/22	Speed governing System operation	1	29	**Chalk and Talk**	R2
30	25/04/22	Mathematical model of speed governing system	1	30	**Chalk and Talk**	R3
31	26/04/22	Speed governing system-Turbine models	1	31	**Chalk and Talk**	T2
32	28/04/22	Division of power system into control areas P-f control of single control area(the uncontrolled and controlled cases)	1	32	**Chalk and Talk**	T3
33	29/04/22	Division of power system into control areas (the uncontrolled and controlled cases)	1	33	**Chalk and Talk**	T1
34	09/05/22	Division of power system into control areas P-f control of two area(the uncontrolled and controlled cases)	1	34	**Chalk and Talk**	T1
35	10/05/22	Division of power system into control areas P-f control of two area(the uncontrolled and controlled cases	1	35	**Chalk and Talk**	T3
36	12/05/22	Analyze the numerical problems on Load Frequency Control	1	36	**Chalk and Talk**	T3

Unit-IV						
37	13/05/22	Power System Stability introduction	1	37	**Chalk and Talk**	T1,R2
38	30/05/22	The stability problem	1	38	**Chalk and Talk**	T2,R3
39	31/05/22	Steady state stability, transient stability and Dynamic stability definations	1	39	**Chalk and Talk**	T1
40	02/06/22	Swing equation.	1	40	**Chalk and Talk**	T2
41	03/06/22	Equal area criterion of stability- Applications of Equal area criterion	1	41	**Chalk and Talk**	T2,R2
42	04/06/22	Step by step solution of swing	1	42	**Chalk and Talk**	T3
43	06/06/22	Factors affecting transient stability, Methods to improve steady state and Transient stability,	1	43	**Chalk and Talk**	T3
44	7/06/22	Introduction to voltage stability	1	44	**Chalk and Talk**	T3
Unit-V						
45	07/06/22	Need of computer control of power systems	1	45	**Chalk and Talk**	T1,R2
46	09/06/22	Concept of energy control centre	1	46	**Chalk and Talk**	T2,R1
47	10/06/22	Concept of energy control centre load dispatch centre with block diagram	1	47	**Chalk and Talk**	T2,R3
48	13/06/22	load dispatch centre and the functions system monitoring	1	48	**Chalk and Talk**	R3
49	14/06/22	Data acquisition and control. System hardware configuration	1	49	**Chalk and Talk**	T2
50	16/06/22	SCADA and EMS functions	1	50	**Chalk and Talk**	T3

51	17/06/22	SCADA and EMS functions	1	51	**Chalk and Talk**	T1
52	18/06/22	Network topology	1	52	**Chalk and Talk**	T1,T2
52	20/06/22	Importance of Load Forecasting and simple techniques of forecasting.	1	52	**Chalk and Talk**	T2,T3
53	21/06/22	Revision class	1	53	**Chalk and Talk**	-

TEXT BOOKS

1. C. L. Wadhwa, Electrical Power Systems, 3rd Edn, New Age International Publishing Co., 2001.

2. D. P. Kothari and I. J. Nagrath, Modern Power System Analysis, 4th Edn, Tata McGraw Hill

Education Private Limited 2011.

REFERENCES:

1. D. P. Kothari: Modern Power System Analysis-Tata Mc Graw Hill Pub. Co. 2003.

2. Hadi Sadat: Power System Analysis –Tata Mc Graw Hill Pub. Co. 2002.

Faculty **H.O.D.** **Principal**

SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGAREDDY DISTRICT, T.S.-501506

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : B.Tech IV YEAR –II SEMSTER
Name of the Faculty member : B SREENIVAS
Name of the subject : ELECTRICAL DISTRIBUTION SYSTEMS

S .No	DATE	Topic(s)	No of Periods	Cumulative no. of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources T1, R1, OR1, OR2...
		Unit-I				
1	03.03.2022	**General Concepts:** Introduction to distribution system	1	1	Chalk and Talk	T1
2	07.03.2022	Distribution system planning	1	2	Chalk and Talk	T1
3	09.03.2022	Factors effecting the Distribution system planning	1	3	Chalk and Talk	T1
4	14.03.2022	Load modelling and characteristics	2	5	Chalk and Talk	T1,R1
5	16.03.2022	Coincidence factor, contribution Factor and Loss factor - Relationship among them	1	6	Chalk and Talk	T2,R1
6	18.03.2022	Load growth, Classification of loads (Residential, commercial, Agricultural and Industrial) and their characteristics.	1	7	Chalk and Talk	T1
7	22.03.2022	**Distribution Feeders:** Design Considerations of Distribution Feeders	1	8	Chalk and Talk	T1
8	24.03.2022	Radial, loop and network types of primary feeders	2	10	Chalk and Talk	R2
9	28.03.2022	LVDS and HVDS	1	11	Chalk and Talk	T2
10	29.03.2022	Application of general circuit constants (A,B,C,D) to radial feeders	1	12	Chalk and Talk	T1
		Unit-II				
11	30.03.2022	**Substations:** Location of Substations	1	13	Chalk and Talk	T1,R2
12	31.03.2022	Rating of distribution substation, service area with 'n' primary feeders	1	14	Chalk and Talk	T1,T2

13	04.04.2022	Optimal location of Substations *(Perpendicular bisector rule and X, Y co-ordinate method)*	2	16	**Chalk and Talk**	T1,T2
14	07.04.2022	**System Analysis:** Voltage drop and power-loss calculations	1	17	**Chalk and Talk**	T2
15	11.04.2022	Derivation for voltage drop and power loss in lines	1	18	**Chalk and Talk**	R2
16	13.04.2022	manual methods of solution for radial networks	1	19	**Chalk and Talk**	T1
17	15.04.2022	three phase balanced primary lines	1	20	**Chalk and Talk**	T2
18	18.04.2022	analysis of non-three phase systems, method to analyze the distribution feeder cost	2	22	**Chalk and Talk**	T2,R2
Unit-III						
19	20.04.2022	**Protection:** Objectives of distribution system protection	1	23	**Chalk and Talk**	T1
20	21.04.2022	types of common faults and procedure for faultcalculations	1	24	**Chalk and Talk**	T2
21	25.04.2022	over current Protective Devices	1	25	**Chalk and Talk**	T2
22	27.04.2022	Principle of operation of Fuses and Auto-Circuit Recloser	1	26	**Chalk and Talk**	T1,R2
23	29.04.2022	Principle of operation of Auto-line sectionalizes and circuit breakers	1	27	**Chalk and Talk**	R2
24	16.05.2022	**Coordination:** Coordination of Protective Devices	1	28	**Chalk and Talk**	T2
25	18.05.2022	Objectives of protection co-ordination	1	29	**Chalk and Talk**	R2
26	20.05.2022	Types of protection coordination: Fuse to Fuse, Auto-Recloser to Fuse	1	30	**Chalk and Talk**	T1
27	23.05.2022	Circuitbreaker to Fuse	1	31	**Chalk and Talk**	T1
28	25.05.2022	Circuit breaker to Auto-Recloser	1	32	**Chalk and Talk**	T2
29	30.05.2022	Numerical problems	1	33	**Chalk and Talk**	T1
Unit-IV						
30	01.06.2022	Compensation for Power Factor Improvement	1	34	**Chalk and Talk**	T1,R2
31	03.06.2022	Capacitive compensation for power-factor control	1	35	**Chalk and Talk**	T1
32	06.06.2022	Different types of power capacitors	1	36	**Chalk and Talk**	T2
33	08.06.2022	shunt and series capacitors	1	37	**Chalk and Talk**	T2
34	10.06.2022	effect of shunt capacitors (Fixed and switched)	1	38	**Chalk and Talk**	R1
35	13.06.2022	effect of series capacitors	1	39	**Chalk and Talk**	T2
36	15.06.2022	difference between shunt and series capacitors	1	40	**Chalk and Talk**	T2
37	20.06.2022	Calculation of Power factor correction, capacitor allocation	1	41	**Chalk and Talk**	T1

38	22.06.2022	Economic justification of capacitors	1	42	**Chalk and Talk**	T1
Unit-V						
39	24.06.2022	Voltage Control	1	43	**Chalk and Talk**	T1,R2
40	27.06.2022	Importance of voltage control	1	44	**Chalk and Talk**	T1,R1
41	29.06.2022	methods of voltage control	2	46	**Chalk and Talk**	T1,R1
42	30.06.2022	Equipment for voltage control	1	47	**Chalk and Talk**	R2
43	01.07.2022	effect of shunt capacitors	1	48	**Chalk and Talk**	T2,R2
44	04.07.2022	effect of series capacitors	1	49	**Chalk and Talk**	T1
45	05.07.2022	effect of AVB/AVR on voltage control	1	50	**Chalk and Talk**	T1
46	06.07.2022	line drop compensation	1	51	**Chalk and Talk**	T1,R2
47	07.07.2022	voltage fluctuations.	1	52	**Chalk and Talk**	T1,R2
48	08.07.2022	Numerical Problems	1	53	**Chalk and Talk**	T1,T2

TEXT BOOKS:

1. Turan Gonen, Electric Power Distribution System Engineering, CRC Press, 3rd Edition 2014.

2. V. Kamaraju, Electrical Power Distribution Systems, Tata Mc Graw Hill Publishing Company,2nd edition, 2010.

REFERENCE BOOKS:

1. G. Ram Murthy, Electrical Power Distribution hand book, 2nd edition, University press 2004.

2. A.S. Pabla, Electric Power Distribution, Tata McGraw Hill Publishing company, 6th edition, 2013.

Faculty **H.O.D.** **Principal**

SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGAREDDY DISTRICT, T.S.-501506

DEPARTMENT OF CSE

LESSON PLAN

Academic Year	:	2021-2022
Class & Semester	:	B.Tech IV Year I Sem
Name of the Faculty member	:	K.DEEPTHI
Name of the subject	:	CRYPTOGRAPHY AND NETWORK SECURITY

Course objectives:

- Explain the objectives of information security.
- Explain the importance and application of each of confidentiality, integrity, authentication and availability
- Understand various cryptographic algorithms.
- Understand the basic categories of threats to computers and networks.
- Describe public-key cryptosystem.
- Describe the enhancements made to IPv4 by IPSec
- Understand Intrusions and intrusion detection
- Discuss the fundamental ideas of public-key cryptography.
- Generate and distribute a PGP key pair and use the PGP package to send an encrypted e-mail message.
- Discuss Web security and Firewalls

Course outcomes:

- Student will be able to understand basic cryptographic algorithms, message and web Authentication and security issues.
- Ability to identify information system requirements for both of them such as client and server.
- Ability to understand the current legal issues towards information security.

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulative periods
1	I	6-9-2021	Introduction, The need for security, Security approaches, Principles of security	1	1
2		8-9-2021,9-9-2021	Types of Security attacks, Security services, Security Mechanisms	2	3
3		13-9-21	A model for Network Security. Introduction, plain text and cipher text.	1	4
4		14-9-2021,15-9-21	Substitution techniques	2	6
5		16-9-2021,17-9-21	Transposition techniques	2	8
6		20-9-21	Encryption and Decryption	1	9
7		22-9-21,23-9-21	Symmetric and Asymmetric key cryptography, Steganography, key range and key size	2	11
8		27-9-21	Possible types of attacks	1	12
9		1-10-21,4-10-21	Block Cipher principles, DES	2	14

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulative periods
10	II	6-10-21	AES	1	15
11		18-10-21,19-10-21	Blowfish, RC5	2	17
12		21-10-21,22-10-21	IDEA, Block cipher operation	2	19
13		24-10-21	Stream ciphers, RC4	1	21
14		25-10-2021,28-10-21	Principles of public key cryptosystems, RSA algorithm	2	23
15		29-10-2021	Elgamal Cryptography	1	24
16		30-10-2021	Diffie-Hellman Key Exchange, Knapsack Algorithm.	1	26
17	III	1-11-2021	Message Authentication	1	27
18		2-11-2021	Secure Hash Algorithm (SHA- 512)	1	28
19		3-11-2021	Authentication requirements	1	29
20		5-11-2021	HMAC	1	30
21		11-11-2021,12-11-2021	CMAC, Digital signatures, Elgamal Digital Signature Scheme.	2	32
22		13-11-2021	Symmetric Key Distribution Using Symmetric &Asymmetric Encryption	1	34
23		15-11-2021	Distribution of Public Keys	1	35
24		17-11-2021	Distribution of Public Keys	1	36
25		18-11-2021	Kerberos	1	38
26		20-11-2021	X.509 Authentication Service	1	39
27		20-11-2021	Public – Key Infrastructure	1	40
28	IV	26-11-2021	Web security considerations	1	41
29		27-11-2021,28-11-2021	Secure Socket Layer	2	43
30		2-12-2021	Transport Layer Security	1	44
31		3-12-2021	HTTPS, Secure Shell (SSH)	1	45
32		9-12-2021	Wireless Security	1	46
33		10-12-2021	Mobile Device Security	2	48
34		11-12-2021	IEEE 802.11 Wireless LAN	1	49
35		14-12-2021	IEEE 802.11i Wireless LAN Security	1	50
36	V	16-12-2021	IP Security overview	1	51
37		17-12-2021	IP Security architecture	2	53
38		18-12-2021	Authentication Header	1	54
39		23-12-2021	Encapsulating security payload,	1	55
40		27-12-2021,29-12-2021	Combining security associations	2	57
41		30-12-2021	Internet Key Exchange	1	58
42		6-1-2022	Secure Multiparty Calculation	2	60
43		07-01-2022	Virtual Elections, Single sign On	1	61
44		08-01-2022	Secure Inter-branch Payment Transactions,	1	62
45		17-01-2022	Cross site Scripting Vulnerability.	1	63

Faculty H.O.D Principal

SCIENT INSTITUTE OF TECHNOLOGY

IBRAHIMPATNAM, RANGAREDDY DISTRICT, T.S.-501506

DEPARTMENT OF CSE

LESSON PLAN

Academic Year	:	2021-2022
Class & Semester	:	B.Tech IV Year I Sem
Name of the Faculty member	:	K.DEEPTHI
Name of the subject	:	CRYPTOGRAPHY AND NETWORK SECURITY

Course objectives:

- Explain the objectives of information security.
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- Understand various cryptographic algorithms.
- Understand the basic categories of threats to computers and networks.
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- Describe the enhancements made to IPv4 by IPSec
- Understand Intrusions and intrusion detection
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- Generate and distribute a PGP key pair and use the PGP package to send an encrypted e-mail message.
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S. No.	Unit No.	Date	Topic	No. of Periods	Cumulative periods
1	I	6-9-2021	Introduction, The need for security, Security approaches, Principles of security	1	1
2		8-9-2021,9-9-2021	Types of Security attacks, Security services, Security Mechanisms	2	3
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8		27-9-21	Possible types of attacks	1	12
9		1-10-21,4-10-21	Block Cipher principles, DES	2	14

S. No.	Unit No.	Date	Topic	No. of Periods	Cumulative periods
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13		24-10-21	Stream ciphers, RC4	1	21
14		25-10-2021,28-10-21	Principles of public key cryptosystems, RSA algorithm	2	23
15		29-10-2021	Elgamal Cryptography	1	24
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20		5-11-2021	HMAC	1	30
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22		13-11-2021	Symmetric Key Distribution Using Symmetric &Asymmetric Encryption	1	34
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26		20-11-2021	X.509 Authentication Service	1	39
27		20-11-2021	Public – Key Infrastructure	1	40
28	IV	26-11-2021	Web security considerations	1	41
29		27-11-2021,28-11-2021	Secure Socket Layer	2	43
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35		14-12-2021	IEEE 802.11i Wireless LAN Security	1	50
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37		17-12-2021	IP Security architecture	2	53
38		18-12-2021	Authentication Header	1	54
39		23-12-2021	Encapsulating security payload,	1	55
40		27-12-2021,29-12-2021	Combining security associations	2	57
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42		6-1-2022	Secure Multiparty Calculation	2	60
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45		17-01-2022	Cross site Scripting Vulnerability.	1	63

Faculty H.O.D Principal

SCIENT INSTITUTE OF TECHNOLOGY

Ibrahimpatnam, R.R Dist 501506

(NAAC Accredited, Approved by AICTE & Affiliated to JNTUH)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : IV-I CSE
Name of the Faculty : PRAVEEN SHINDE
Name of the Course : ARTIFICIAL INTELLIGENCE

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	07/09/21	Problem Solving by Search-I	1	1	Chalk & Talk	T1
2	07/09/21	Introduction to AI, Intelligent Agents	1	2	Chalk & Talk	T1
3	09/09/21	Problem Solving by Search –II: Problem-Solving Agents	1	3	Chalk & Talk	T1
4	09/09/21	Searching for Solutions, Uninformed Search Strategies:	1	4	Chalk & Talk	T1
5	10/09/21	Breadth-first search, Uniform cost search, Depth-first search	2	6	Chalk & Talk	T1
6	10/09/21	Iterative deepening Depth-first search, Bidirectional search	1	7	Chalk & Talk	T1
7	12/09/21	Informed (Heuristic) Search Strategies: Greedy best-first search, A* search, Heuristic Functions	1	8	PPT	T1
8	13/09/21	Online Search Agents and Unknown Environment	1	9	Chalk & Talk	T1
9	14/09/21	Searching with Partial Observations	1	10	PPT	T1
		UNIT II				
16	25/09/21	Problem Solving by Search-II and Propositional Logic	1	11	Chalk & Talk	T1
17	27/09/21	Adversarial Search: Games, Optimal Decisions in Games	1	12	Chalk & Talk	T1
18	28/09/21	Alpha–Beta Pruning, Imperfect Real-Time Decisions.	1	13	PPT	T1
19	29/09/21	Constraint Satisfaction Problems: Defining Constraint Satisfaction Problems	1	14	Chalk & Talk	T1
20	29/09/21	Correlation Analysis	1	15	Chalk & Talk	T1
21	30/09/21	Propositional Theorem Proving: Inference and proofs, Proof by resolution,	1	16	Chalk & Talk	T1
22	01/10/21	Horn clauses and definite clauses	1	17	Chalk & Talk	T1
		UNIT III				
24	05/10/21	Logic and Knowledge Representation First-Order Logic:	1	18	Chalk & Talk	T1
25	07/10/21	Representation, Syntax and Semantics of First-Order Logic	1	19	Chalk & Talk	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
26	08/10/21	Using First-Order Logic, Knowledge Engineering in First-Order Logic.	1	20	Chalk & Talk	T1
27	20/10/21	Inference in First-Order Logic: Propositional vs. First-Order Inference, Unification and Lifting, Forward Chaining	1	21	Chalk & Talk	T1
28	21/10/21	Lazy learner	1	22	Chalk & Talk	T1
		UNIT IV				
34	01/11/21	Planning Classical Planning:	1	23	Chalk & Talk	T1
35	02/11/21	Definition of Classical Planning, Algorithms for Planning with State-Space Search,	1	24	Chalk & Talk	T1
36	06/11/21	Planning Graphs, other Classical Planning Approaches,	1	25	Chalk & Talk	T1
37	11/11/21	Planning and Acting in the Real World:	1	26	PPT	T1
38	15/11/21	Planning and Acting in Nondeterministic Domains, Multi agent Planning.	1	27	PPT	T1
		UNIT V				
44	23/11/21	Uncertain knowledge and Learning	1	28	Chalk & Talk	T1
45	25/11/21	Uncertainty: Acting under Uncertainty, Basic Probability Notation, Inference Using Full Joint Distributions	1	29	PPT	T1
46	01/12/21	Bayesian Networks,	1	30	PPT	T1
47	03/12/21	Relational and First-Order Probability	1	31	Chalk & Talk	T1
48	04/12/21	First-Order Probability	1	32	PPT	T1
49	06/12/21	Dempster-	1	33	Chalk & Talk	T1
50	11/01/22	Learning:	1	34	Chalk & Talk	T1
51	11/01/22	Logical Formulation of Learning	1	35	PPT	T1

TEXT BOOKS(T1,T2)

T1 : Artificial Intelligence A Modern Approach, Third Edition, Stuart Russell and Peter Norvig, Pearson Education.

REFERENCE BOOKS (R1)

R1 : Artificial Intelligence, 3rd Edn, E. Rich and K.Knight (TMH)

R2 : Artificial Intelligence, 3rd Edn., Patrick Henny Winston, Pearson Education.

R3 : Artificial Intelligence, Shivani Goel, Pearson Education.

R4 : Artificial Intelligence and Expert systems – Patterson, Pearson Education

Faculty **H.O.D** **Principal**

SCIENT INSTITUTE OF TECHNOLOGY

Ibrahimpatnam, R.R Dist 501506

(NAAC Accredited, Approved by AICTE & Affiliated to JNTUH)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : IV-I CSE
Name of the Faculty : PRAVEEN SHINDE
Name of the Course : ARTIFICIAL INTELLIGENCE

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	07/09/21	Problem Solving by Search-I	1	1	Chalk & Talk	T1
2	07/09/21	Introduction to AI, Intelligent Agents	1	2	Chalk & Talk	T1
3	09/09/21	Problem Solving by Search –II: Problem-Solving Agents	1	3	Chalk & Talk	T1
4	09/09/21	Searching for Solutions, Uninformed Search Strategies:	1	4	Chalk & Talk	T1
5	10/09/21	Breadth-first search, Uniform cost search, Depth-first search	2	6	Chalk & Talk	T1
6	10/09/21	Iterative deepening Depth-first search, Bidirectional search	1	7	Chalk & Talk	T1
7	12/09/21	Informed (Heuristic) Search Strategies: Greedy best-first search, A* search, Heuristic Functions	1	8	PPT	T1
8	13/09/21	Online Search Agents and Unknown Environment	1	9	Chalk & Talk	T1
9	14/09/21	Searching with Partial Observations	1	10	PPT	T1
		UNIT II				
16	25/09/21	Problem Solving by Search-II and Propositional Logic	1	11	Chalk & Talk	T1
17	27/09/21	Adversarial Search: Games, Optimal Decisions in Games	1	12	Chalk & Talk	T1
18	28/09/21	Alpha–Beta Pruning, Imperfect Real-Time Decisions.	1	13	PPT	T1
19	29/09/21	Constraint Satisfaction Problems: Defining Constraint Satisfaction Problems	1	14	Chalk & Talk	T1
20	29/09/21	Correlation Analysis	1	15	Chalk & Talk	T1
21	30/09/21	Propositional Theorem Proving: Inference and proofs, Proof by resolution,	1	16	Chalk & Talk	T1
22	01/10/21	Horn clauses and definite clauses	1	17	Chalk & Talk	T1
		UNIT III				
24	05/10/21	Logic and Knowledge Representation First-Order Logic:	1	18	Chalk & Talk	T1
25	07/10/21	Representation, Syntax and Semantics of First-Order Logic	1	19	Chalk & Talk	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
26	08/10/21	Using First-Order Logic, Knowledge Engineering in First-Order Logic.	1	20	Chalk & Talk	T1
27	20/10/21	Inference in First-Order Logic: Propositional vs. First-Order Inference, Unification and Lifting, Forward Chaining	1	21	Chalk & Talk	T1
28	21/10/21	Lazy learner	1	22	Chalk & Talk	T1
		UNIT IV				
34	01/11/21	Planning Classical Planning:	1	23	Chalk & Talk	T1
35	02/11/21	Definition of Classical Planning, Algorithms for Planning with State-Space Search,	1	24	Chalk & Talk	T1
36	06/11/21	Planning Graphs, other Classical Planning Approaches,	1	25	Chalk & Talk	T1
37	11/11/21	Planning and Acting in the Real World:	1	26	PPT	T1
38	15/11/21	Planning and Acting in Nondeterministic Domains, Multi agent Planning.	1	27	PPT	T1
		UNIT V				
44	23/11/21	Uncertain knowledge and Learning	1	28	Chalk & Talk	T1
45	25/11/21	Uncertainty: Acting under Uncertainty, Basic Probability Notation, Inference Using Full Joint Distributions	1	29	PPT	T1
46	01/12/21	Bayesian Networks,	1	30	PPT	T1
47	03/12/21	Relational and First-Order Probability	1	31	Chalk & Talk	T1
48	04/12/21	First-Order Probability	1	32	PPT	T1
49	06/12/21	Dempster-	1	33	Chalk & Talk	T1
50	11/01/22	Learning:	1	34	Chalk & Talk	T1
51	11/01/22	Logical Formulation of Learning	1	35	PPT	T1

TEXT BOOKS(T1,T2)

T1 : Artificial Intelligence A Modern Approach, Third Edition, Stuart Russell and Peter Norvig, Pearson Education.

REFERENCE BOOKS (R1)

R1 : Artificial Intelligence, 3rd Edn, E. Rich and K.Knight (TMH)

R2 : Artificial Intelligence, 3rd Edn., Patrick Henny Winston, Pearson Education.

R3 : Artificial Intelligence, Shivani Goel, Pearson Education.

R4 : Artificial Intelligence and Expert systems – Patterson, Pearson Education

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : IV-I CSE
Name of the Faculty : V.GOPINATH
Name of the Course : DATA MINING

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	07/09/21	Data Mining: Data–Types of Data–,	1	1	Chalk & Talk	T1
2	07/09/21	Data Mining Functionalities	1	2	Chalk & Talk	T1
3	09/09/21	Interestingness Patterns	1	3	Chalk & Talk	T1
4	09/09/21	Classification of Data Mining systems	1	4	Chalk & Talk	T1
5	11/09/21	Data mining Task primitives	2	6	Chalk & Talk	T1
6	11/09/21	Integration of Data mining system with a Data warehouse	1	7	Chalk & Talk	T1
7	14/09/21	Major issues in Data Mining–Data Preprocessing.	1	8	PPT	T1
		UNIT II				
16	25/09/21	Introduction to Association Rule Mining	1	9	Chalk & Talk	T1
17	28/09/21	Mining Frequent Patterns	1	10	Chalk & Talk	T1
18	28/09/21	Associations and correlations	1	11	PPT	T1
19	29/09/21	Mining Various kinds of Association Rules	1	12	Chalk & Talk	T1
20	29/09/21	Correlation Analysis	1	13	Chalk & Talk	T1
21	30/09/21	Constraint based Association mining	1	14	Chalk & Talk	T1
22	01/10/21	Graph Pattern Mining	1	15	Chalk & Talk	T1
		UNIT III				
24	05/10/21	Introduction to Classification and Prediction	1	16	Chalk & Talk	T1
25	07/10/21	Basic concepts–Decision tree induction	1	17	Chalk & Talk	T1
26	08/10/21	Bayesian classification	1	18	Chalk & Talk	T1
27	20/10/21	Rule–based classification	1	19	Chalk & Talk	T1
28	21/10/21	Lazy learner	1	20	Chalk & Talk	T1
		UNIT IV				
34	01/11/21	Introduction to Clustering and Applications	1	21	Chalk & Talk	T1
35	02/11/21	Cluster analysis–Types of Data in Cluster Analysis	1	22	Chalk & Talk	T1
36	06/11/21	Categorization of Major Clustering Methods	1	23	Chalk & Talk	T1
37	11/11/21	Partitioning Methods	1	24	PPT	T1
38	15/11/21	Hierarchical Methods	1	25	PPT	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
39	15/11/21	Density–Based Methods	1	26	Chalk & Talk	T1
40	16/11/21	Grid–Based Methods	1	27	Chalk & Talk	T1
41	17/11/21	Outlier Analysis	1	28	Chalk & Talk	T1
		UNIT V				
44	23/11/21	Basic concepts in Mining data streams	1	29	Chalk & Talk	T1
45	25/11/21	Mining Time–series data	1	30	PPT	T1
46	01/12/21	Mining sequence patterns in Transactional databases	1	31	PPT	T1
47	03/12/21	Mining Object	1	32	Chalk & Talk	T1
48	04/12/21	Spatial– Multimedia–Text and Web data	1	33	PPT	T1
49	06/12/21	Spatial Data mining	1	34	Chalk & Talk	T1
50	12/01/22	Multimedia Data mining–Text Mining–	1	35	Chalk & Talk	T1
51	12/01/22	Mining the World Wide Web.	1	36	PPT	T1

TEXT BOOKS(T1,T2)

T1 : Data Mining – Concepts and Techniques – Jiawei Han & Micheline Kamber, 3rd Edition Elsevier.

T2 : Data Mining Introductory and Advanced topics – Margaret H Dunham, PEA.

REFERENCE BOOKS (R1)

R1 : Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques (Second Edition), Morgan Kaufmann, 2005.Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques (Second Edition), Morgan Kaufmann, 2005.

Faculty H.O.D Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : IV-I CSE
Name of the Faculty : V.GOPINATH
Name of the Course : DATA MINING

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	07/09/21	Data Mining: Data–Types of Data–,	1	1	Chalk & Talk	T1
2	07/09/21	Data Mining Functionalities	1	2	Chalk & Talk	T1
3	09/09/21	Interestingness Patterns	1	3	Chalk & Talk	T1
4	09/09/21	Classification of Data Mining systems	1	4	Chalk & Talk	T1
5	11/09/21	Data mining Task primitives	2	6	Chalk & Talk	T1
6	11/09/21	Integration of Data mining system with a Data warehouse	1	7	Chalk & Talk	T1
7	14/09/21	Major issues in Data Mining–Data Preprocessing.	1	8	PPT	T1
		UNIT II				
16	25/09/21	Introduction to Association Rule Mining	1	9	Chalk & Talk	T1
17	28/09/21	Mining Frequent Patterns	1	10	Chalk & Talk	T1
18	28/09/21	Associations and correlations	1	11	PPT	T1
19	29/09/21	Mining Various kinds of Association Rules	1	12	Chalk & Talk	T1
20	29/09/21	Correlation Analysis	1	13	Chalk & Talk	T1
21	30/09/21	Constraint based Association mining	1	14	Chalk & Talk	T1
22	01/10/21	Graph Pattern Mining	1	15	Chalk & Talk	T1
		UNIT III				
24	05/10/21	Introduction to Classification and Prediction	1	16	Chalk & Talk	T1
25	07/10/21	Basic concepts–Decision tree induction	1	17	Chalk & Talk	T1
26	08/10/21	Bayesian classification	1	18	Chalk & Talk	T1
27	20/10/21	Rule–based classification	1	19	Chalk & Talk	T1
28	21/10/21	Lazy learner	1	20	Chalk & Talk	T1
		UNIT IV				
34	01/11/21	Introduction to Clustering and Applications	1	21	Chalk & Talk	T1
35	02/11/21	Cluster analysis–Types of Data in Cluster Analysis	1	22	Chalk & Talk	T1
36	06/11/21	Categorization of Major Clustering Methods	1	23	Chalk & Talk	T1
37	11/11/21	Partitioning Methods	1	24	PPT	T1
38	15/11/21	Hierarchical Methods	1	25	PPT	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
39	15/11/21	Density–Based Methods	1	26	Chalk & Talk	T1
40	16/11/21	Grid–Based Methods	1	27	Chalk & Talk	T1
41	17/11/21	Outlier Analysis	1	28	Chalk & Talk	T1
		UNIT V				
44	23/11/21	Basic concepts in Mining data streams	1	29	Chalk & Talk	T1
45	25/11/21	Mining Time–series data	1	30	PPT	T1
46	01/12/21	Mining sequence patterns in Transactional databases	1	31	PPT	T1
47	03/12/21	Mining Object	1	32	Chalk & Talk	T1
48	04/12/21	Spatial– Multimedia–Text and Web data	1	33	PPT	T1
49	06/12/21	Spatial Data mining	1	34	Chalk & Talk	T1
50	12/01/22	Multimedia Data mining–Text Mining–	1	35	Chalk & Talk	T1
51	12/01/22	Mining the World Wide Web.	1	36	PPT	T1

TEXT BOOKS(T1,T2)

T1 : Data Mining – Concepts and Techniques – Jiawei Han & Micheline Kamber, 3rd Edition Elsevier.

T2 : Data Mining Introductory and Advanced topics – Margaret H Dunham, PEA.

REFERENCE BOOKS (R1)

R1 : Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques (Second Edition), Morgan Kaufmann, 2005.Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques (Second Edition), Morgan Kaufmann, 2005.

Faculty H.O.D Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : III-I CSE
Name of the Faculty : SMD. SHAFIULLA
Name of the Course : WEB TECHNOLOGIES

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	07/09/21	Introduction to Web technologies	1	1	Chalk & Talk	T1
2	07/09/21	Introduction to PHP	1	2	Chalk & Talk	T1
3	09/09/21	Declaring variables, data types,	1	3	Chalk & Talk	T1
4	09/09/21	Arrays & strings	1	4	Chalk & Talk	T1
5	11/09/21	Operators & expressions	2	6	Chalk & Talk	T1
6	11/09/21	control structures,	1	7	Chalk & Talk	T1
7	14/09/21	functions	1	8	PPT	T1
8	16/09/21	Reading data from web form controls like text boxes, radio buttons,	2	10	Chalk & Talk	T1
9	17/09/21	Reading data from web form controls like lists	1	11	PPT	T1
10	20/09/21	Handling File Uploads	1	12	PPT	T1
11	20/09/21	Connecting to database	1	13	Chalk & Talk	T1
12	21/09/21	Executing simple queries, Handling results	1	14	Chalk & Talk	T1
13	23/09/21	Handling sessions and cookies	2	16	Chalk & Talk	T1
14	23/09/21	File Handling in PHP	1	17	Chalk & Talk	T1
15	24/09/21	Listing directories.	2	19	PPT	T1
		UNIT II				
16	25/09/21	Introduction to HTML	1	20	Chalk & Talk	T1
17	28/09/21	Tags in HTML	1	21	Chalk & Talk	T1
18	28/09/21	Introduction to XML	1	22	PPT	T1
19	29/09/21	XML tags attributes and their values	1	23	Chalk & Talk	T1
20	29/09/21	XML document type definitions	1	24	Chalk & Talk	T1
21	30/09/21	Xml schemas	1	25	Chalk & Talk	T1
22	01/10/21	Xml parsers introduction	1	26	Chalk & Talk	T1
23	04/10/21	DOM and SAX parsers	1	27	Chalk & Talk	T1
		UNIT III				
24	05/10/21	Introduction to CGI	1	28	Chalk & Talk	T1
25	07/10/21	Comparison of CGI and Servlets	1	29	Chalk & Talk	T1
26	08/10/21	Lifecycle of servlet	1	30	Chalk & Talk	T1
27	20/10/21	Deploying a servlet	1	31	Chalk & Talk	T1
28	21/10/21	Servlet API	1	32	Chalk & Talk	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
29	23/10/21	Reading Servlet parameters	2	34	Chalk & Talk	T1
30	25/10/21	Reading Initialization parameters	1	35	Chalk & Talk	T1
31	25/10/21	Handling Http Request & Responses	1	36	Chalk & Talk	T1
32	30/10/21	Using Cookies and Sessions	1	37	Chalk & Talk	T1
33	30/10/21	connecting to a database using JDBC	1	38	Chalk & Talk	T1
		UNIT IV				
34	01/11/21	Introduction to JSP	1	39	Chalk & Talk	T1,R2,R4
35	02/11/21	The Anatomy of a JSP Page	1	40	Chalk & Talk	T1,R2
36	06/11/21	JSP Processing	1	41	Chalk & Talk	T1,R2,R4
37	11/11/21	Declarations	1	42	PPT	T1,R2,R4
38	15/11/21	Directives	1	43	PPT	T1,R2,R4
39	15/11/21	Expressions & Code Snippets	1	44	Chalk & Talk	T1,R2,R4
40	16/11/21	Introduction to implicit objects	1	45	Chalk & Talk	T1,R2,R4
41	17/11/21	Using Beans in JSP Pages	1	46	Chalk & Talk	T1,R2,R4
42	18/11/21	Using Cookies and session for session tracking	2	48	PPT	R1
43	22/11/21	connecting to database in JSP	1	49	Chalk & Talk	R1
		UNIT V				
44	23/11/21	Introduction to Client-side Scripting	1	50	Chalk & Talk	T1
45	25/11/21	Introduction to Javascript	1	51	PPT	T1
46	01/12/21	Javascript language – declaring variables	1	52	PPT	T1
47	03/12/21	Scope of variables	1	53	Chalk & Talk	T1
48	04/12/21	functions	1	54	PPT	T1
49	06/12/21	event handlers like onclick, onsubmit	1	55	Chalk & Talk	T1
50	12/01/22	Document Object Model	1	56	Chalk & Talk	T1
51	12/01/22	Form validation	1	57	PPT	T1

TEXT BOOKS(T1,T2)

T1 : Web Technologies, Uttam K Roy, Oxford University Press

T2 : The Complete Reference PHP — Steven Holzner, Tata McGraw-Hill

REFERENCE BOOKS (R1,R2,R3,R4,R5,R6)

R1 : Web Programming, building internet applications, Chris Bates 2" edition. Wiley Dreamtech

R2 : Java Server Pages —Hans Bergsten, SPD O'Reilly,

R3 : Java Script, D.Flanagan

R4 : Beginning Web Programming-Jon Duckett WROX.

R5 : Programming world wide web, R.W.Sebesta, Fourth Edition, Pearson.

R6 : Internet and World Wide Web — How to program. Dietel and Nieto, Pearson

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : III-I CSE
Name of the Faculty : SMD. SHAFIULLA
Name of the Course : WEB TECHNOLOGIES

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	07/09/21	Introduction to Web technologies	1	1	Chalk & Talk	T1
2	07/09/21	Introduction to PHP	1	2	Chalk & Talk	T1
3	09/09/21	Declaring variables, data types,	1	3	Chalk & Talk	T1
4	09/09/21	Arrays & strings	1	4	Chalk & Talk	T1
5	11/09/21	Operators & expressions	2	6	Chalk & Talk	T1
6	11/09/21	control structures,	1	7	Chalk & Talk	T1
7	14/09/21	functions	1	8	PPT	T1
8	16/09/21	Reading data from web form controls like text boxes, radio buttons,	2	10	Chalk & Talk	T1
9	17/09/21	Reading data from web form controls like lists	1	11	PPT	T1
10	20/09/21	Handling File Uploads	1	12	PPT	T1
11	20/09/21	Connecting to database	1	13	Chalk & Talk	T1
12	21/09/21	Executing simple queries, Handling results	1	14	Chalk & Talk	T1
13	23/09/21	Handling sessions and cookies	2	16	Chalk & Talk	T1
14	23/09/21	File Handling in PHP	1	17	Chalk & Talk	T1
15	24/09/21	Listing directories.	2	19	PPT	T1
		UNIT II				
16	25/09/21	Introduction to HTML	1	20	Chalk & Talk	T1
17	28/09/21	Tags in HTML	1	21	Chalk & Talk	T1
18	28/09/21	Introduction to XML	1	22	PPT	T1
19	29/09/21	XML tags attributes and their values	1	23	Chalk & Talk	T1
20	29/09/21	XML document type definitions	1	24	Chalk & Talk	T1
21	30/09/21	Xml schemas	1	25	Chalk & Talk	T1
22	01/10/21	Xml parsers introduction	1	26	Chalk & Talk	T1
23	04/10/21	DOM and SAX parsers	1	27	Chalk & Talk	T1
		UNIT III				
24	05/10/21	Introduction to CGI	1	28	Chalk & Talk	T1
25	07/10/21	Comparison of CGI and Servlets	1	29	Chalk & Talk	T1
26	08/10/21	Lifecycle of servlet	1	30	Chalk & Talk	T1
27	20/10/21	Deploying a servlet	1	31	Chalk & Talk	T1
28	21/10/21	Servlet API	1	32	Chalk & Talk	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
29	23/10/21	Reading Servlet parameters	2	34	Chalk & Talk	T1
30	25/10/21	Reading Initialization parameters	1	35	Chalk & Talk	T1
31	25/10/21	Handling Http Request & Responses	1	36	Chalk & Talk	T1
32	30/10/21	Using Cookies and Sessions	1	37	Chalk & Talk	T1
33	30/10/21	connecting to a database using JDBC	1	38	Chalk & Talk	T1
		UNIT IV				
34	01/11/21	Introduction to JSP	1	39	Chalk & Talk	T1,R2,R4
35	02/11/21	The Anatomy of a JSP Page	1	40	Chalk & Talk	T1,R2
36	06/11/21	JSP Processing	1	41	Chalk & Talk	T1,R2,R4
37	11/11/21	Declarations	1	42	PPT	T1,R2,R4
38	15/11/21	Directives	1	43	PPT	T1,R2,R4
39	15/11/21	Expressions & Code Snippets	1	44	Chalk & Talk	T1,R2,R4
40	16/11/21	Introduction to implicit objects	1	45	Chalk & Talk	T1,R2,R4
41	17/11/21	Using Beans in JSP Pages	1	46	Chalk & Talk	T1,R2,R4
42	18/11/21	Using Cookies and session for session tracking	2	48	PPT	R1
43	22/11/21	connecting to database in JSP	1	49	Chalk & Talk	R1
		UNIT V				
44	23/11/21	Introduction to Client-side Scripting	1	50	Chalk & Talk	T1
45	25/11/21	Introduction to Javascript	1	51	PPT	T1
46	01/12/21	Javascript language – declaring variables	1	52	PPT	T1
47	03/12/21	Scope of variables	1	53	Chalk & Talk	T1
48	04/12/21	functions	1	54	PPT	T1
49	06/12/21	event handlers like onclick, onsubmit	1	55	Chalk & Talk	T1
50	12/01/22	Document Object Model	1	56	Chalk & Talk	T1
51	12/01/22	Form validation	1	57	PPT	T1

TEXT BOOKS(T1,T2)

T1 : Web Technologies, Uttam K Roy, Oxford University Press

T2 : The Complete Reference PHP — Steven Holzner, Tata McGraw-Hill

REFERENCE BOOKS (R1,R2,R3,R4,R5,R6)

R1 : Web Programming, building internet applications, Chris Bates 2" edition. Wiley Dreamtech

R2 : Java Server Pages —Hans Bergsten, SPD O'Reilly,

R3 : Java Script, D.Flanagan

R4 : Beginning Web Programming-Jon Duckett WROX.

R5 : Programming world wide web, R.W.Sebesta, Fourth Edition, Pearson.

R6 : Internet and World Wide Web — How to program. Dietel and Nieto, Pearson

Faculty H.O.D Principal

LESSON PLAN

LECTURE SCHEDULE (INFORMATION RETRIEVAL SYSTEMS(2021-22))-CSE-A

SNO	DATE	Topic(s)	No of Periods	Cumulative no of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources (T1, R1, OR1,OR2..)
		UNIT I				
1	07-09-2021,09-09-2021	Introduction to Information Retrieval Systems: Definition of Information Retrieval System, Objectives of Information Retrieval Systems	2	2	Chalk and Talk	T1
2	9/11/2021	Functional Overview-Item Normalization	1	3	Chalk and Talk	T1
3	9/13/2021	Selection dissemination of Information,Document Database Search	1	4	Chalk and Talk	T1
4	9/17/2021	Index Database Search,Multimedia Database Search.	1	5	Chalk and Talk	T1
5	9/18/2021	Relationship to Database Management Systems	1	6	Chalk and Talk	T1
6	9/20/2021	Digital Libraries and Data Warehouses	1	7	Chalk and Talk	T1
7	9/21/2021	Information Retrieval System Capabilities: Search Capabilities-Boolean Logic,Proximity,Contiguous Word Phrases,Fuzzy Searches,Term Masking	1	8	Chalk and Talk	T1
8	9/21/2021	Numeric and Date Ranges,Concept/Thesaurus Expansion,Natural Language Queries,Multimedia Queries	1	9	Chalk and Talk	T1
9	9/25/2021	Browse Capabilities	1	10	Chalk and Talk	T1
10	9/27/2021	Miscellaneous Capabilities	1	11	Chalk and Talk	T1
		UNIT II				
11	9/28/2021	Cataloging and Indexing: History and Objectives of Indexing	1	12	Chalk and Talk	T1
12	9/30/2021	Indexing Process	1	13	Chalk and Talk	T1
13	04-10-2021,05-10-2021	Automatic Indexing	2	15	Chalk and Talk	T1
14	10/8/2021	Information Extraction	1	16	Chalk and Talk	T1
15	10/18/2021	Data Structure: Introduction to Data Structure	1	17	Chalk and Talk	T1
16	10/21/2021	Stemming Algorithms-Introduction,Porter Stemming Algorithm,Dictionary Look-Up Stemmers	1	18	Chalk and Talk	T1
17	10/22/2021	Successor Stemmers,Conclusions	1	19	Chalk and Talk	T1
18	10/23/2021	Inverted File Structure	1	20	Chalk and Talk	T1
19	10/25/2021	N-Gram Data Structures	1	21	Chalk and Talk	T1
20	10/26/2021	PAT Data Structure	1	22	Chalk and Talk	T1
21	10/28/2021	Signature File Structure	1	23	Chalk and Talk	T1
22	10/30/2021	Hypertext and XML Data Structures	1	24	Chalk and Talk	T1
23	11/1/2021	Hidden Markov Models	1	26	Chalk and Talk	T1
		UNIT III				
24	11/2/2021	Automatic Indexing: Classes of Automatic Indexing	1	27	Chalk and Talk	T1
25	8-11-2021,12-11-20	Statistical Indexing	2	29	Chalk and Talk	T1
26	16-011-2021	Natural Language	1	30	Chalk and Talk	T1
27	11/18/2021	ConceptIndexing	1	31	Chalk and Talk	T1
28	11/20/2021	Hypertext Linkages	1	32	Chalk and Talk	T1
29	11/22/2021	Document and Term Clustering: Introduction to Clustering	1	33	Chalk and Talk	T1
30	11/23/2021	Thesaurus Generation	1	34	Chalk and Talk	T1
31	25-11-2021,27-11-2021	Item Clustering	2	36	Chalk and Talk	T1
32	11/29/2021	Hierarchy of Clusters	1	37	Chalk and Talk	T1

		UNIT IV				
33	11/30/2021	User Search Techniques: Search Statements and Binding	1	38	Chalk and Talk	T1
34	-12-2021,02-12-20	Similarity Measures and Ranking,	2	40	Chalk and Talk	T1
35	12/3/2021	Relevance Feedback	1	41	Chalk and Talk	T1
36	12/4/2021	Selective Dissemination of Information Search	1	42	Chalk and Talk	T1
37	12/6/2021	Weighted Searches of Boolean Systems	1	43	Chalk and Talk	T1
38	12/7/2021	Searching the INTERNET and Hypertext	1	44	Chalk and Talk	T1
39	12/8/2021	Information Visualization: Introduction to Information Visualization	1	45	Chalk and Talk	T1
40	12/10/2021	Cognition and Perception	1	46	Chalk and Talk	T1
41	-12-2021,13-12-20	Information Visualization Technologies	2	48	Chalk and Talk	T1
		UNIT V				
42	12/23/2021	Text Search Algorithms: Introduction to Text Search Techniques	1	49	Chalk and Talk	T1
43	12/27/2021	Software Text Search Algorithms-Brute Force Approach,Knuth-Pratt-Morris	1	50	Chalk and Talk	T1
44	12/29/2021	Boyer-Moore Algorithm,Aho-Corasick,Shift add algorithm	1	51	Chalk and Talk	T1
45	1/3/2021	Hardware Text Search Systems	1	52	Chalk and Talk	T1
46	1/5/2022	Multimedia Information Retrieval: Spoken Language Audio Retrieval,Non-Speech Audio Retrieval	1	53	Chalk and Talk	T1
47	1/6/2022	Graph Retrieval,Imagery Retrieval	1	54	Chalk and Talk	T1
48	1/17/2022	Video Retrieval	1	55	Chalk and Talk	T1

FACULTY SIGNATURE

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PRINCIPAL

LESSON PLAN

LECTURE SCHEDULE (INFORMATION RETRIEVAL SYSTEMS(2021-22))-CSE-A

SNO	DATE	Topic(s)	No of Periods	Cumulative no of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources (T1, R1, OR1,OR2..)
		UNIT I				
1	07-09-2021,09-09-2021	Introduction to Information Retrieval Systems: Definition of Information Retrieval System, Objectives of Information Retrieval Systems	2	2	Chalk and Talk	T1
2	9/11/2021	Functional Overview-Item Normalization	1	3	Chalk and Talk	T1
3	9/13/2021	Selection dissemination of Information,Document Database Search	1	4	Chalk and Talk	T1
4	9/17/2021	Index Database Search,Multimedia Database Search.	1	5	Chalk and Talk	T1
5	9/18/2021	Relationship to Database Management Systems	1	6	Chalk and Talk	T1
6	9/20/2021	Digital Libraries and Data Warehouses	1	7	Chalk and Talk	T1
7	9/21/2021	Information Retrieval System Capabilities: Search Capabilities-Boolean Logic,Proximity,Contiguous Word Phrases,Fuzzy Searches,Term Masking	1	8	Chalk and Talk	T1
8	9/21/2021	Numeric and Date Ranges,Concept/Thesaurus Expansion,Natural Language Queries,Multimedia Queries	1	9	Chalk and Talk	T1
9	9/25/2021	Browse Capabilities	1	10	Chalk and Talk	T1
10	9/27/2021	Miscellaneous Capabilities	1	11	Chalk and Talk	T1
		UNIT II				
11	9/28/2021	Cataloging and Indexing: History and Objectives of Indexing	1	12	Chalk and Talk	T1
12	9/30/2021	Indexing Process	1	13	Chalk and Talk	T1
13	04-10-2021,05-10-2021	Automatic Indexing	2	15	Chalk and Talk	T1
14	10/8/2021	Information Extraction	1	16	Chalk and Talk	T1
15	10/18/2021	Data Structure: Introduction to Data Structure	1	17	Chalk and Talk	T1
16	10/21/2021	Stemming Algorithms-Introduction,Porter Stemming Algorithm,Dictionary Look-Up Stemmers	1	18	Chalk and Talk	T1
17	10/22/2021	Successor Stemmers,Conclusions	1	19	Chalk and Talk	T1
18	10/23/2021	Inverted File Structure	1	20	Chalk and Talk	T1
19	10/25/2021	N-Gram Data Structures	1	21	Chalk and Talk	T1
20	10/26/2021	PAT Data Structure	1	22	Chalk and Talk	T1
21	10/28/2021	Signature File Structure	1	23	Chalk and Talk	T1
22	10/30/2021	Hypertext and XML Data Structures	1	24	Chalk and Talk	T1
23	11/1/2021	Hidden Markov Models	1	26	Chalk and Talk	T1
		UNIT III				
24	11/2/2021	Automatic Indexing: Classes of Automatic Indexing	1	27	Chalk and Talk	T1
25	8-11-2021,12-11-20	Statistical Indexing	2	29	Chalk and Talk	T1
26	16-011-2021	Natural Language	1	30	Chalk and Talk	T1
27	11/18/2021	ConceptIndexing	1	31	Chalk and Talk	T1
28	11/20/2021	Hypertext Linkages	1	32	Chalk and Talk	T1
29	11/22/2021	Document and Term Clustering: Introduction to Clustering	1	33	Chalk and Talk	T1
30	11/23/2021	Thesaurus Generation	1	34	Chalk and Talk	T1
31	25-11-2021,27-11-2021	Item Clustering	2	36	Chalk and Talk	T1
32	11/29/2021	Hierarchy of Clusters	1	37	Chalk and Talk	T1

UNIT IV						
33	11/30/2021	User Search Techniques: Search Statements and Binding	1	38	Chalk and Talk	T1
34	-12-2021,02-12-20	Similarity Measures and Ranking,	2	40	Chalk and Talk	T1
35	12/3/2021	Relevance Feedback	1	41	Chalk and Talk	T1
36	12/4/2021	Selective Dissemination of Information Search	1	42	Chalk and Talk	T1
37	12/6/2021	Weighted Searches of Boolean Systems	1	43	Chalk and Talk	T1
38	12/7/2021	Searching the INTERNET and Hypertext	1	44	Chalk and Talk	T1
39	12/8/2021	Information Visualization: Introduction to Information Visualization	1	45	Chalk and Talk	T1
40	12/10/2021	Cognition and Perception	1	46	Chalk and Talk	T1
41	-12-2021,13-12-20	Information Visualization Technologies	2	48	Chalk and Talk	T1
UNIT V						
42	12/23/2021	Text Search Algorithms: Introduction to Text Search Techniques	1	49	Chalk and Talk	T1
43	12/27/2021	Software Text Search Algorithms-Brute Force Approach,Knuth-Pratt-Morris	1	50	Chalk and Talk	T1
44	12/29/2021	Boyer-Moore Algorithm,Aho-Corasick,Shift add algorithm	1	51	Chalk and Talk	T1
45	1/3/2021	Hardware Text Search Systems	1	52	Chalk and Talk	T1
46	1/5/2022	Multimedia Information Retrieval: Spoken Language Audio Retrieval,Non-Speech Audio Retrieval	1	53	Chalk and Talk	T1
47	1/6/2022	Graph Retrieval,Imagery Retrieval	1	54	Chalk and Talk	T1
48	1/17/2022	Video Retrieval	1	55	Chalk and Talk	T1

FACULTY SIGNATURE

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PRINCIPAL

SCIENT INSTITUTE OF TECHNOLOGY

Ibrahimpatnam, R.R Dist 501506

(NAAC Accredited, Approved by AICTE & Affiliated to JNTUH)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : II-I CSE
Name of the Faculty : SMD. SHAFIULLA
Name of the Course : OBJECT ORIENTED PROGRAMMING USING C++

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	20/10/21	Introduction to Object-Oriented Thinking	1	1	Chalk & Talk	T1
2	21/10/21	Different paradigms for problem solving	1	2	Chalk & Talk	T1
3	21/10/21	need for OOP paradigm	1	3	Chalk & Talk	T1
4	22/10/21	Differences between OOP and Procedure oriented programming	1	4	Chalk & Talk	T1
5	23/10/21	Overview of OOP conceptsAbstraction, Encapsulation, Inheritance and Polymorphism.	2	6	Chalk & Talk	T1
6	27/10/21	Introduction to C++	1	7	Chalk & Talk	T1
7	28/10/21	Structure of C++ program , Datatypes	1	8	PPT	T1
8	29/10/21	Declaration of variables, Expressions	2	10	Chalk & Talk	T1
9	30/10/21	Operators, Operator Precedence,	1	11	PPT	T1
10	3/11/21	Evaluation of expressions, Type conversions,	1	12	PPT	T1
11	03/11/21	Pointers, Arrays, Pointers and Arrays	1	13	Chalk & Talk	T1
12	05/11/21	Strings, Structures, References	1	14	Chalk & Talk	T1
13	06/11/21	Flow control statement	2	16	Chalk & Talk	T1
14	11/11/21	Functions	1	17	Chalk & Talk	T1
15	12/11/21	Dynamic memory allocation & Deallocation	2	19	PPT	T1
		UNIT II				
16	17/11/21	Introduction to Classes	1	20	Chalk & Talk	T1
17	18/11/21	Class definition, Class structure, Class objects	1	21	Chalk & Talk	T1
18	24/11/21	Class scope, this pointer, Friends to a class, Static class members,	1	22	PPT	T1
19	25/11/21	Constant member functions, Constructors and Destructors,	1	23	Chalk & Talk	T1
20	01/12/21	Dynamic creation and destruction of objects	1	24	Chalk & Talk	T1
21	02/12/21	Data abstraction, ADT and information hiding.	1	25	Chalk & Talk	T1
		UNIT III				
22	03/12/21	Introduction to Inheritance	1	26	Chalk & Talk	T1
23	04/12/21	Defining a class hierarchy, Different forms of inheritance	1	27	Chalk & Talk	T1
24	08/12/21	Defining the Base and Derived classes	1	28	Chalk & Talk	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
25	09/12/21	Access to the base class members, Base and Derived class construction	1	29	Chalk & Talk	T1
26	16/12/21	Destructors, Virtual base class.	1	30	Chalk & Talk	T1
27	17/12/21	Virtual Functions	2	32	Chalk & Talk	T1
28	18/12/21	Dynamic binding through virtual functions	1	33	Chalk & Talk	T1
29	23/12/21	Virtual function call mechanism, Pure virtual functions	1	34	Chalk & Talk	T1
30	29/12/21	Abstract classes,	1	35	Chalk & Talk	T1
31	30/12/21	Polymorphism & Implications of polymorphic use of classes, Virtual destructors.	1	36	Chalk & Talk	T1
		UNIT IV				
32	05/01/22	Introduction to C++ I/O	1	37	Chalk & Talk	T1
33	06/01/22	I/O using C functions	1	38	Chalk & Talk	T1
34	07/01/22	Stream classes hierarchy	1	39	Chalk & Talk	T1
35	08/01/22	Stream I/O	1	40	PPT	T1
36	19/01/22	File streams and String streams	1	41	PPT	T1
37	20/01/22	Overloading operators	1	42	Chalk & Talk	T1
38	21/01/22	Error handling during file operations,	1	43	Chalk & Talk	T1
39	27/01/22	Formatted I/O	1	44	Chalk & Talk	T1
		UNIT V				
40	02/02/22	Introduction to Exception Handling	1	45	Chalk & Talk	T1
41	03/02/22	Benefits of exception handling	1	46	PPT	T1
42	04/02/22	Throwing an exception	1	47	PPT	T1
43	09/02/22	Exception handling keywords	1	48	Chalk & Talk	T1
44	10/02/22	Exception objects	1	49	PPT	T1
45	11/02/22	Exception specifications	1	50	Chalk & Talk	T1
46	17/02/22	Stack unwinding, Re-throwing an exception,	1	51	Chalk & Talk	T1
47	24/02/22	Catching all exceptions.	1	52	PPT	T1

TEXT BOOKS(T1,T2)

T1 : The Complete Reference C++, 4th Edition, Herbert Schildt, Tata McGraw Hill.

T2 : Problem solving with C++: The Object of Programming, 4th Edition, Walter Savitch, Pearson Education.

REFERENCE BOOKS (R1,R2,R3)

R1 : The C++ Programming Language, 3rd Edition, B. Stroutstrup, Pearson Education.

R2 : OOP in C++, 3rd Edition, T. Gaddis, J. Walters and G. Muganda, Wiley Dream Tech Press.

R3 : Object Oriented Programming in C++, 3rd Edition, R. Lafore, Galigotia Publications Pvt Ltd.

Faculty H.O.D Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LESSON PLAN

Academic Year : 2021-2022
Class & Semester : II-I CSE
Name of the Faculty : SMD. SHAFIULLA
Name of the Course : OBJECT ORIENTED PROGRAMMING USING C++

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
		UNIT I				
1	20/10/21	Introduction to Object-Oriented Thinking	1	1	Chalk & Talk	T1
2	21/10/21	Different paradigms for problem solving	1	2	Chalk & Talk	T1
3	21/10/21	need for OOP paradigm	1	3	Chalk & Talk	T1
4	22/10/21	Differences between OOP and Procedure oriented programming	1	4	Chalk & Talk	T1
5	23/10/21	Overview of OOP conceptsAbstraction, Encapsulation, Inheritance and Polymorphism.	2	6	Chalk & Talk	T1
6	27/10/21	Introduction to C++	1	7	Chalk & Talk	T1
7	28/10/21	Structure of C++ program , Datatypes	1	8	PPT	T1
8	29/10/21	Declaration of variables, Expressions	2	10	Chalk & Talk	T1
9	30/10/21	Operators, Operator Precedence,	1	11	PPT	T1
10	3/11/21	Evaluation of expressions, Type conversions,	1	12	PPT	T1
11	03/11/21	Pointers, Arrays, Pointers and Arrays	1	13	Chalk & Talk	T1
12	05/11/21	Strings, Structures, References	1	14	Chalk & Talk	T1
13	06/11/21	Flow control statement	2	16	Chalk & Talk	T1
14	11/11/21	Functions	1	17	Chalk & Talk	T1
15	12/11/21	Dynamic memory allocation & Deallocation	2	19	PPT	T1
		UNIT II				
16	17/11/21	Introduction to Classes	1	20	Chalk & Talk	T1
17	18/11/21	Class definition, Class structure, Class objects	1	21	Chalk & Talk	T1
18	24/11/21	Class scope, this pointer, Friends to a class, Static class members,	1	22	PPT	T1
19	25/11/21	Constant member functions, Constructors and Destructors,	1	23	Chalk & Talk	T1
20	01/12/21	Dynamic creation and destruction of objects	1	24	Chalk & Talk	T1
21	02/12/21	Data abstraction, ADT and information hiding.	1	25	Chalk & Talk	T1
		UNIT III				
22	03/12/21	Introduction to Inheritance	1	26	Chalk & Talk	T1
23	04/12/21	Defining a class hierarchy, Different forms of inheritance	1	27	Chalk & Talk	T1
24	08/12/21	Defining the Base and Derived classes	1	28	Chalk & Talk	T1

S. No.	Date	Topic	No. of Periods	Cumulative periods	Teaching Methodology (Chalk & Talk, PPT's, Video lectures etc.)	Resources
25	09/12/21	Access to the base class members, Base and Derived class construction	1	29	Chalk & Talk	T1
26	16/12/21	Destructors, Virtual base class.	1	30	Chalk & Talk	T1
27	17/12/21	Virtual Functions	2	32	Chalk & Talk	T1
28	18/12/21	Dynamic binding through virtual functions	1	33	Chalk & Talk	T1
29	23/12/21	Virtual function call mechanism, Pure virtual functions	1	34	Chalk & Talk	T1
30	29/12/21	Abstract classes,	1	35	Chalk & Talk	T1
31	30/12/21	Polymorphism & Implications of polymorphic use of classes, Virtual destructors.	1	36	Chalk & Talk	T1
		UNIT IV				
32	05/01/22	Introduction to C++ I/O	1	37	Chalk & Talk	T1
33	06/01/22	I/O using C functions	1	38	Chalk & Talk	T1
34	07/01/22	Stream classes hierarchy	1	39	Chalk & Talk	T1
35	08/01/22	Stream I/O	1	40	PPT	T1
36	19/01/22	File streams and String streams	1	41	PPT	T1
37	20/01/22	Overloading operators	1	42	Chalk & Talk	T1
38	21/01/22	Error handling during file operations,	1	43	Chalk & Talk	T1
39	27/01/22	Formatted I/O	1	44	Chalk & Talk	T1
		UNIT V				
40	02/02/22	Introduction to Exception Handling	1	45	Chalk & Talk	T1
41	03/02/22	Benefits of exception handling	1	46	PPT	T1
42	04/02/22	Throwing an exception	1	47	PPT	T1
43	09/02/22	Exception handling keywords	1	48	Chalk & Talk	T1
44	10/02/22	Exception objects	1	49	PPT	T1
45	11/02/22	Exception specifications	1	50	Chalk & Talk	T1
46	17/02/22	Stack unwinding, Re-throwing an exception,	1	51	Chalk & Talk	T1
47	24/02/22	Catching all exceptions.	1	52	PPT	T1

TEXT BOOKS(T1,T2)

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REFERENCE BOOKS (R1,R2,R3)

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R2 : OOP in C++, 3rd Edition, T. Gaddis, J. Walters and G. Muganda, Wiley Dream Tech Press.

R3 : Object Oriented Programming in C++, 3rd Edition, R. Lafore, Galigotia Publications Pvt Ltd.

Faculty H.O.D Principal

LESSON PLAN

LECTURE SCHEDULE (COMPUTER ORGANIZATION AND ARCHITECTURE 2021-22 SEM-I) CSE-A

SNO		Topic(s)	No of Periods	Cumulative no of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources (T1, R1, OR1,OR2..)
		UNIT I				
1	10/20/2021	Introduction, Block diagram of Digital Computer Definition of Computer Organization, Computer Design and Computer Architecture.	1	1	Chalk and Talk	T1
2	10/21/2021	Register Transfer language, Register Transfer	1	2	Chalk and Talk	
3	22-10-2021,23-10-2021	Bus and Memory transfers	2	3	Chalk and Talk	
4	25-10-2021,26-10-2021	Arithmetic Micro operations	2	5	Chalk and Talk	
5	10/28/2021	Logic micro operations	1	7	Chalk and Talk	
6	10/29/2021	Shift micro operations, Arithmetic logic shift unit	1	8	Chalk and Talk	
7	11/3/2021	Instruction codes	1	9	Chalk and Talk	
7	11/5/2021	Computer Registers, Computer Instructions	1	10	Chalk and Talk	
	11/8/2021	Timing and Control	1	11	Chalk and Talk	
8	9-11-2021,10-11-2021	Instruction Cycle	2	12	Chalk and Talk	
9	11/12/2021	Memory Reference Instructions	1	14	Chalk and Talk	
10	11/12/2021	Input-Output and Interrupt	1	15	Chalk and Talk	
		UNIT II				
11	15-11-2021,16-11-2021	Control memory	2	17	Chalk and Talk	T1
12	11/18/2021	Address sequencing	1	18	Chalk and Talk	
13	11/22/2021	Micro program example	1	19	Chalk and Talk	
14	11/23/2021	Design of control unit	1	20	Chalk and Talk	
15	11/25/2021	General register Organization	1	21	Chalk and Talk	
16	11/29/2021	Instruction formats, Addressing Modes	1	22	Chalk and Talk	
17	30-11-2021,1-12-2021	Data Transfer and Manipulation	2	24	Chalk and Talk	
18	02-12-2021,02-12-2021	Program Control	2	26	Chalk and Talk	
		UNIT III				
19	12/3/2021	Data types, Complements	1	27	Chalk and Talk	T1
20	12/7/2021	Fixed Point Representation, Floating Point Representation	1	28	Chalk and Talk	
21	12/10/2021	Addition and subtraction	1	29	Chalk and Talk	
22	12/16/2021	Multiplication Algorithms	1	30	Chalk and Talk	
23	12/17/2021	Division Algorithms	1	31	Chalk and Talk	
24	12/20/2021	Floating-point Arithmetic Operations	1	32	Chalk and Talk	
25	21-12-2021,23-12-2021	Decimal Arithmetic unit	2	34	Chalk and Talk	
26	12/27/2021	Decimal Arithmetic operations	1	35	Chalk and Talk	

UNIT IV						
27	12/28/2021	Input-Output Interface	1	36	Chalk and Talk	T1
28	03-12-2021,06-12-2021	Asynchronous data transfer	2	38	Chalk and Talk	
29	1/17/2021	Modes of Transfer	1	39	Chalk and Talk	
30	1/20/2021	Priority Interrupt	1	40	Chalk and Talk	
31	1/21/2021	Direct Memory Access	1	41	Chalk and Talk	
32	25-01-2021,27-01-2021	Memory Hierarchy, Main Memory	2	43	Chalk and Talk	
33	1/28/2021	Auxiliary Memory	1	44	Chalk and Talk	
34	1/31/2021	Associate Memory	1	45	Chalk and Talk	
35	01-02-2022,02-02-2022	Cache Memory	2	47	Chalk and Talk	
36	2/4/2022	CISC Characteristics, RISC Characteristics	1	48	Chalk and Talk	
UNIT V						
37	2/5/2022	Parallel Processing	1	49	Chalk and Talk	T1
38	2/8/2022	Pipelining, Arithmetic Pipeline	1	50	Chalk and Talk	
39	09-02-2022,09-02-2022	Instruction Pipeline	2	52	Chalk and Talk	
40	2/10/2022	RISC Pipeline	1	53	Chalk and Talk	
41	16-02-2022,17-02-2022	Vector Processing, Array Processor	2	55	Chalk and Talk	
42	2/18/2022	Characteristics of Multiprocessors	1	56	Chalk and Talk	
43	2/21/2022	Interconnection Structures, Inter processor arbitration	1	57	Chalk and Talk	
44	23-02-2022,24-02-2022	Inter processor communication and Synchronization	2	59	Chalk and Talk	
45	2/25/2022	Cache Coherence	1	60	Chalk and Talk	

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LESSON PLAN

LECTURE SCHEDULE (COMPUTER ORGANIZATION AND ARCHITECTURE 2021-22 SEM-I) CSE-B

SNO		Topic(s)	No of Periods	Cumulative no of periods	Teaching Methodology (Chalk and Talk, PPTs, Video Lectures etc.)	Resources (T1, R1, OR1,OR2..)
		UNIT I				
1	10/20/2021	Introduction, Block diagram of Digital Computer Definition of Computer Organization, Computer Design and Computer Architecture.	1	1	Chalk and Talk	T1
2	10/23/2021	Register Transfer language, Register Transfer	1	2	Chalk and Talk	
3	23-10-2021,25-10-2021	Bus and Memory transfers	2	3	Chalk and Talk	
4	26-10-2021,28-10-2021	Arithmetic Micro operations	2	5	Chalk and Talk	
5	10/30/2021	Logic micro operations	1	7	Chalk and Talk	
6	11/1/2021	Shift micro operations, Arithmetic logic shift unit	1	8	Chalk and Talk	
7	11/2/2021	Instruction codes	1	9	Chalk and Talk	
7	11/5/2021	Computer Registers, Computer Instructions	1	10	Chalk and Talk	
	11/8/2021	Timing and Control	1	11	Chalk and Talk	
8	9-11-2021,12-11-2021	Instruction Cycle	2	12	Chalk and Talk	
9	11/15/2021	Memory Reference Instructions	1	14	Chalk and Talk	
10	11/16/2021	Input-Output and Interrupt	1	15	Chalk and Talk	
		UNIT II				
11	18-11-2021,20-11-2021	Control memory	2	17	Chalk and Talk	T1
12	11/22/2021	Address sequencing	1	18	Chalk and Talk	
13	11/23/2021	Micro program example	1	19	Chalk and Talk	
14	11/26/2021	Design of control unit	1	20	Chalk and Talk	
15	11/27/2021	General register Organization	1	21	Chalk and Talk	
16	11/29/2021	Instruction formats, Addressing Modes	1	22	Chalk and Talk	
17	30-11-2021,02-12-2021	Data Transfer and Manipulation	2	24	Chalk and Talk	
18	12/4/2021	Program Control	2	26	Chalk and Talk	
		UNIT III				
19	12/6/2021	Data types, Complements	1	27	Chalk and Talk	T1
20	12/7/2021	Fixed Point Representation, Floating Point Representation	1	28	Chalk and Talk	
21	12/10/2021	Addition and subtraction	1	29	Chalk and Talk	
22	12/16/2021	Multiplication Algorithms	1	30	Chalk and Talk	
23	12/17/2021	Division Algorithms	1	31	Chalk and Talk	
24	12/20/2021	Floating-point Arithmetic Operations	1	32	Chalk and Talk	
25	21-12-2021,23-12-2021	Decimal Arithmetic unit	2	34	Chalk and Talk	
26	12/27/2021	Decimal Arithmetic operations	1	35	Chalk and Talk	

		UNIT IV				
27	12/28/2021	Input-Output Interface	1	36	Chalk and Talk	T1
28	03-12-2021,06-12-2021	Asynchronous data transfer	2	38	Chalk and Talk	
29	1/17/2021	Modes of Transfer	1	39	Chalk and Talk	
30	1/20/2021	Priority Interrupt	1	40	Chalk and Talk	
31	1/21/2021	Direct Memory Access	1	41	Chalk and Talk	
32	25-01-2021,27-01-2021	Memory Hierarchy, Main Memory	2	43	Chalk and Talk	
33	1/28/2021	Auxiliary Memory	1	44	Chalk and Talk	
34	1/31/2021	Associate Memory	1	45	Chalk and Talk	
35	01-02-2022,02-02-2022	Cache Memory	2	47	Chalk and Talk	
36	2/4/2022	CISC Characteristics, RISC Characteristics	1	48	Chalk and Talk	
		UNIT V				
37	2/5/2022	Parallel Processing	1	49	Chalk and Talk	T1
38	2/8/2022	Pipelining, Arithmetic Pipeline	1	50	Chalk and Talk	
39	09-02-2022,10-02-2022	Instruction Pipeline	2	52	Chalk and Talk	
40	2/11/2022	RISC Pipeline	1	53	Chalk and Talk	
41	2/16/2022	Vector Processing, Array Processor	2	55	Chalk and Talk	
42	2/17/2022	Characteristics of Multiprocessors	1	56	Chalk and Talk	
43	2/18/2022	Interconnection Structures, Inter processor arbitration	1	57	Chalk and Talk	
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