Lesson Plan				
Name of the Faculty	**:**	**Ms. ANJU**		
Discipline	**:**	**Electronics and Communication Engg.**		
Semester	**:**	**2nd**		
Subject	**:**	**Electronics Instruments and Measurement**		
Lesson Plan Duration	**:**	**16th Weeks(15.01.2026 to 30.04.2026)**		
Work Load (Lecture/ Practical) per week (in hours): 03 T +04 P				

Week	Date	Theory		Practical
		Lecture day	Topic (including assignment/ test)	Topic
1st	15.01.2026 to 16.01.2026	1	Introduction to Basics of Instruments and Measurements	Introduction of Electronics instruments Kits
		2	Definition of measurement and methods of measurement.	
2nd	19.01.2026 to 22.01.2026	3	Types of instruments, Specifications of instruments: Accuracy, precision,	Measurement of voltage, resistance and current using analog multimeter.
		4	Specifications of instruments: sensitivity, resolution, range.Errors in measurement,	
		5	Sources of errors.Limiting errors,	Viva
3rd	27.01.2026 to 30.01.2026	6	Loading effect, Importance and applications of standards and calibration.	Measurement of voltage, resistance, frequency using digital multimeter.
		7	Revision	
		8	Voltage, Current and Resistance Measurement using Moving Coil instruments	Viva
4th	02.02.2026 to 06.02.2026	9	Voltage, Current and Resistance Measurement using Moving Iron instruments	To study the front panel controls of CRO
		10	Principles of measurement of DC voltage, DC current ,AC voltage, AC current.	
		11	Principles of measurement of AC voltage, AC current.	Viva
5th	09.02.2026 to 13.02.2026	12	Principles of operation and construction of PMMC	Measurement of voltage, frequency, time period and phase using CRO.
		13	VOM meter	
		14	Revision	Viva
6th	16.02.2026 to 20.02.2026	15	**1st Sessional Test.**	Measurement of voltage, frequency, time and phase using DSO.
		16	Disscussion on 1st Sessional and Assignment	
		17	**Unit-III** Construction and working of Cathode Ray Tube (CRT).	Viva
7th	23.02.2026 to 27.02.2026	18	Block diagram description of a basic CRO and triggered sweep oscilloscope.	Measurement of unknown resistance using Wheat Stone bridge.
		19	Description of front panel controls of CRO.	
		20	Specifications of CRO and their applications.	Viva
8th	02.03.2026 to 06.03.2026	21	Measurement of current, voltage, frequency, time period and phase using CRO.	Measurement of phase using lissajous pattern on CRO.
		22	lissajous pattern for phase measurement.	
		23	Digital storage oscilloscope (DSO) : block diagram and working principle.	Viva

9th	09.03.2026 to 13.03.2026	24	**Unit-IV** Description of bridge and difference b/w AC and DC bridge.	Measurement of unknown resistance using Wheat Stone bridge.
		25	DC bridges: Wheat stone bridge. AC bridges: Maxwell's induction bridge.Revision	
		26	Hay's bridge, De-Sauty's bridge.Revision	Viva
10th	16.03.2026 to 20.03.2026	27	Block diagram and workig principle of Q meter.Revision	Measurement of Q of a coil
		28	**2nd Sessional Test**	
		29	Disscussion on 2nd Sessional and Assignment	Viva
11th	24.03.2026 to 27.03.2026	30	Explanation of block diagram, specifications of low frequency and RF generators	Measurement of inductance using Hay's Bridge.
		31	pulse generator	
		32	function generator	Viva
12th	30.03.2026 to 03.04.2026	33	**Unit V-** Comparison of analog and digital instruments,	Measurement of inductance using Maxwell Induction Bridge.
		34	Block diagram and working of a digital multi-meter	
		35	Applications and Limitations of digital multi-meters.	Viva
13th	06.04.2026 to 10.04.2026	36	Working principle of logic probe	Measurement of capacitance using De Sauty's Bridge.
		37	logic pulser	
		38	Revision	Viva
14th	13.04.2026 to 17.04.2026	39	Revision	Use of logic pulser and logic probe.
		40	Revision	
		41	Revision	Viva
15th	20.04.2026 to 24.04.2026	42	3rd Sessional Test	Revision
		43	Disscussion on 3rd Sessional and Assignment	
		44	Revision	Revision
16th	27.04.2026 to 30.04.2026	45	Discussion on Important Questions	Revision
		46	Discussion on Important Questions	
		47	Discussion on Important Questions	Internal Viva

Lesson Plan			
Name of the Faculty	**:**	**Mr.Sunny Shrama**	
Discipline	**:**	**Electronics and Communication Engg.**	
Semester	**:**	**2nd**	
Subject	**:**	**Electronic Devices and Circuits**	
Lesson Plan Duration	**:**	**16th Weeks**	
Work Load (Lecture/ Practical) per week (in hours): 04 P			

Week	Date	Practical days	Practical
			Topic
1st	15.01.2026 to 16.01.2026	1	Plotting of V-I characteristics of a PN junction diode
		2	Viva
2nd	19.01.2026 to 22.01.2026	3	Plotting of V-I characteristics of a Zener diode
		4	Viva
3rd	27.01.2026 to 30.01.2026	5	To observe input and output of series clipping circuits.
		6	Viva
4th	02.02.2026 to 06.02.2026	7	To observe input and output of shunt clipping circuits.
		8	Viva
5th	09.02.2026 to 13.02.2026	9	To observe input and output of positive clamping circuit
		10	Viva
6th	16.02.2026 to 20.02.2026	11	To observe input and output of negative clamping circuit.
		12	Viva
7th	23.02.2026 to 27.02.2026	13	Fabrication of Half-wave rectifier circuit on breadboard and observe the output
		14	Viva
8th	02.03.2026 to 06.03.2026	15	Fabrication of Full-wave rectifier circuit on breadboard and observe the output
		16	Viva
9th	09.03.2026 to 13.03.2026	17	Plotting of the wave shape of full wave rectifier with a. Shunt capacitor filter b. Series inductor filter
		18	Viva
10th	16.03.2026 to 20.03.2026	19	Plotting of input and output characteristics and calculation of parameters of transistors in CE configuration.
		20	Viva

11th	24.03.2026 to 27.03.2026	21	Plotting of input and output characteristics and calculation of parameters of transistors in CB configuration
		22	Viva
12th	30.03.2026 to 03.04.2026	23	Measurement of voltage gain, input and output impedance in a single stage CE amplifier circuit.
		24	Viva
13th	06.04.2026 to 10.04.2026	25	Plotting of V-I characteristics of FET.
		26	Viva
14th	13.04.2026 to 17.04.2026	27	Revision
		28	Revision
15th	20.04.2026 to 24.04.2026	29	Revision
		30	Revision
16th	27.04.2026 to 30.04.2026	31	Revision
		32	Internal Viva

Lesson Plan			
Name of the Faculty	**:**	**Mr. Rishi Pal**	
Discipline	**:**	**Electronics and Communication Engg.**	
Semester	**:**	**2nd**	
Subject	**:**	**Electronic Devices and Circuits**	
Lesson Plan Duration	**:**	**16th Weeks**	
Work Load (Lecture/ Practical) per week (in hours): 03 T			

Week	Date	Theory	
		Lecture day	Topic (including assignment/ test)
1st	15.01.2026 to 16.01.2026	1	UNIT I Semiconductor Physics 1.1 Review of basic atomic structure and energy levels, concept of insulators,
		2	conductors and semiconductors, atomic structure of Germanium (Ge) and Silicon (Si), covalent bonds.
2nd	19.01.2026 to 22.01.2026	3	1.2 Concept of intrinsic and extrinsic semiconductor, process of doping.
		4	1.3 Energy level diagram of conductors, insulators and semiconductors;
		5	minority and majority charge carriers.
3rd	27.01.2026 to 30.01.2026	6	1.4 P and N type semiconductors and their conductivity,
		7	effect of temperature on conductivity of intrinsic semiconductors
		8	Revision
4th	02.02.2026 to 06.02.2026	9	Revision
		10	UNIT II Semiconductor Diode 2.1 PN junction diode, mechanism of current flow in PN junction,
		11	forward and reverse biased PN junction, potential barrier,
5th	09.02.2026 to 13.02.2026	12	drift and diffusion currents, depletion layer,
		13	concept of junction capacitance in forward and reverse biased condition.
		14	2.2 V-I characteristics, static and dynamic resistance and their value calculation from the characteristics
6th	16.02.2026 to 20.02.2026	15	**1st Sessional Test**
		16	Disscussion on 1st Sessional and Assignment
		17	2.3 Application of diode as half-wave,

$_{7}$th	23.02.2026 to 27.02.2026	18	full wave and bridge rectifiers. Peak Inverse Voltage, rectification efficiencies and ripple factor calculations, shunt capacitor filter, series inductor filter, LC and π filters.
		19	2.4 Types of diodes, characteristics and applications of Zener diodes. Zener and avalanche breakdown
		20	2.5 Introduction to Clipping and Clamping Circuits
$_{8}$th	02.03.2026 to 06.03.2026	21	UNIT III Introduction to Bipolar-Transistors 3.1 Concept of a bipolar transistor, its structure,
		22	PNP and NPN transistors, their symbols and mechanism of current flow;
		23	Current relations in a transistor; concept of leakage current;
$_{9}$th	09.03.2026 to 13.03.2026	24	3.2 CB, CE, CC configurations of a transistor;
		25	Input and output characteristics in CB and CE configurations; input and output dynamic resistance in CB and CE configurations;
		26	Current amplification factors, relation between α, β and γ. Comparison of CB, CE and CC Configurations;
$_{10}$th	16.03.2026 to 20.03.2026	27	3.3 Transistor as an amplifier in CE Configuration; concept of DC load line and calculation of current gain and voltage gain using DC load line.
		28	**2nd Sessional Test**
		29	Discussion on 2nd Sessional Test and Assignment
$_{11}$th	24.03.2026 to 27.03.2026	30	UNIT IV Transistor Biasing Circuits Concept of transistor biasing and selection of operating point. Need for stabilization of operating point
		31	Different types of biasing circuits.
		32	Single stage transistor amplifier circuit, concept of dc and ac load line and its use.
$_{12}$th	30.03.2026 to 03.04.2026	33	Explanation of phase reversal of output voltage with respect to input voltage.
		34	UNIT V Field Effect Transistors Construction, operation and characteristics of FETs and their applications
		35	Construction, operation and characteristics of a MOSFET in depletion and enhancement modes and its applications.
$_{13}$th	06.04.2026 to 10.04.2026	36	Comparison of JFET, MOSFET and BJT.
		37	Revision
		38	Revision

14th	13.04.2026 to 17.04.2026	39	Revision
		40	Revision
		41	Revision
15th	20.04.2026 to 24.04.2026	42	**3rd Sessional Test**
		43	Discussion on 3rd Sessional Test and Assignment
		44	Revision
16th	27.04.2026 to 30.04.2026	45	Revision
		46	Revision
		47	Discussion on Important Questions

LESSON PLAN

NAME OF THE FACULTY : ANURADHA
DISCIPLINE : ECE
SEMESTER :2nd
SUBJECT : ESDM
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : Lectures = 02

WEEK		THEORY	
	LECTURE DAY	Date	TOPIC (WITH ASSIGNMENT & TESTS)
1	1		**Introduction**
	2		Basics of ecology, Eco system- concept
2	3		Sustainable development
	4		Renewable and non-renewable Sources of energy and their advantages& disadvantages
3	5		Rain water harvesting
	6		Deforestation – its effects & control measures
4	7		Air Pollution: Source of air pollution
	8		Effect of air pollution on human health, economy, Air pollution control methods
5	9		Definition and Source of noise pollution, Unit of noise, Effect of noise pollution, Acceptable noise level, Different method of minimizing noise pollution
	10		Revision of Air and Noise Pollution, ASSIGNMENT 1
1st sessional test			
6	11		Water Pollution: Impurities in water, Cause of water pollution
	12		Source of water pollution. Effect of water pollution on human health, Concept of DO, BOD, COD
7	13		Prevention of water pollution- Water treatment processes, Sewage treatment
	14		Water quality standard. Definition and Sources of soil pollution
8	15		Effects and Control of soil pollution, Types of Solid waste- House hold, Industrial, Agricultural, Biomedical,
	16		Disposal of solid waste, Solid waste management E-waste, E – waste management
9	17		Impact of Energy Usage on Environment Global Warming
	18		Green House Effect, Depletion of Ozone Layer, Acid Rain
10	19		Eco-friendly Material, Recycling of Material, Concept of Green Buildings
	20		Concept of Carbon Credit & Carb on footprint.
11	21		Revision of Impact of Energy Usage on Environment, ASSIGNMENT 2
2nd sessional test			
	22		Natural Disaster: such as Flood, Cyclone

12	23		Natural Disaster: Earthquakes and Landslides etc.
	24		Man-made Disaster: such as Fire, Industrial Pollution
13	25		Man-made Disaster: Nuclear Disaster, Biological Disasters, Accidents (Air, Sea Rail & Road)
	26		Man-made Disaster: Structural failures (Building and Bridge), War& Terrorism etc.
14	27		Disaster Preparedness Plan Prediction, Disaster Preparedness Early Warnings and Safety Measures of Disaster
	28		Psychological response and Management (Trauma, Stress), Psychological response and Management (Rumor and Panic), ASSIGNMENT 3
			3rd Sessional test
15	29		Revision and discussion of previous year Q. Papers
	30		Revision and discussion of previous year Q. Papers

LESSON PLAN			
NAME OF FACULTY: PRIYANKA **SEMESTER: 2nd Sem** **SUBJECT: ENGINEERING GRAPHICS** **LESSON PLAN DURATION: 16 WEEKS (15.01.2026 to 30.04.2026)** **WORK LOAD (LECTURE/PRACTICAL) PER WEEK: (6 Practical)**			
Week	**Date**	**Practical days**	**Topics**
1st	15.01.2026 to 16.01.2026	1	**UNIT I** 1. Introduction to Engineering Drawing and Graphics 1.1 Introduction to use and care of drawing instruments, drawing materials, layout and sizes of drawing sheets and drawing boards.
		2	Symbols and conventions- a) Conventions of Engineering Materials, Sectional Breaks and Conventional lines.b) Civil Engineering Sanitary fitting symbols c) Electrical fitting symbols for domestic interior installations.
2nd	19.01.2026 to 22.01.2026	3	Geometrical construction-geometrical figures such as triangles, rectangles, circles,ellipses and curves, hexagons,pentagons bisecting a line and arc , division of line and circle with the help of drawing instruments
		4	**2. Technical Lettering of Alphabet and Numerals**Definition and classification of lettering, Free hand (of height of 5,8,12 mm) and instrumental lettering (of height 20 to 35 mm) : upper case and lower case, single and double stroke, vertical and inclined (Gothic lettering) at 75 degree to horizontal and with suitable height to width ratio 7:4.
3rd	27.01.2026 to 30.01.2026	5	**3. Dimensioning** Necessity of dimensioning, method and principles of dimensioning (mainly theoretical instructions). Dimensioning of overall sizes, circles, threaded holes, chamfered surfaces, angles,tapered surfaces, holes, equally spaced on P.C.D., countersunk holes, counter bored holes, cylindrical parts, narrow spaces and gaps,radii, curves and arches.
		6	4. Scales Scales –Needs and importance (theoretical instructions), Type of scales, Definition of Representative Fraction (R.F.) and Length of Scale. To draw/construct plain scales
4th	02.02.2026 to 06.02.2026	7	To draw/construct diagonal scales.
		8	UNIT II 1. Orthographic Projections 1.1 Theory of orthographic projections (Elaborate theoretical instructions). 1.2 Three views of orthographic projections of different objects of given pictorial view of a block in 1st and 3rd angle.
5th	09.02.2026 to 13.02.2026	9	Revision
		10	Revision

6th	16.02.2026 to 20.02.2026	11	**1st Sessional Test**
		12	Discussion on 1st Sessional and Assignment
7th	23.02.2026 to 27.02.2026	13	1.3 Projection of Points in different quadrant
		14	1.4 Projection of Straight Line (1st angle) i. Line parallel to both the planes. ii. Line perpendicular to any one of the reference plane and parallel to others iii. Line inclined to any one of the references and parallel to another plane.
8th	02.03.2026 to 06.03.2026	15	1.5 Projection of Plane – Different lamina like square rectangular, triangular, circle and Hexagonal pentagon. Trace of planes (HT and VT).
		16	1.6 Identification of surfaces.
9th	09.03.2026 to 13.03.2026	17	2. Sectioning 2.1 Importance and salient features 2.2 Drawing of full section, half section, partial or broken out sections, Offset sections, revolved sections and removed sections (theoretical only).
		18	2.3 Orthographic sectional views of different objects
10th	16.03.2026 to 20.03.2026	19	**2nd Sessional Test**
		20	Discussion on 2nd Sessional and Assignment
11th	24.03.2026 to 27.03.2026	21	**UNIT III** 1. Introduction of projection of right solids such as prism & pyramid (square, Pentagon, Hexagonal) cube, cone & cylinder (Axes perpendicular to H.P and parallel to V.P.)
		22	2. Introduction of sections of right solids - Section planes, Sections of Hexagonal prism, pentagon pyramid, cylinder and cone (Section plane parallel to anyone reference planes and perpendicular to V.P. and inclined to H.P.)
12th	30.03.2026 to 03.04.2026	23	3. Development of Surfaces – Development of lateral surfaces of right solids like cone, cylinder, pentagonal prism, pyramid and hexagonal pyramid (Simple problems)
		24	**UNIT IV** **Isometric Views** 1. Fundamentals of isometric projections and isometric scale. 2. Isometric views of different laminas like circle, pentagon and hexagon.
13th	06.04.2026 to 10.04.2026	25	3. Isometric views of different regular solids like cylinder, cone, cube, cuboid, pyramid and prism. 4. Isometric views from given different orthographic projections(front, side and top view)
		26	**UNIT V** **Introduction to AutoCAD** Basic introduction and operational instructions of various commands in AutoCAD.
14th	13.04.2026 to 17.04.2026	27	**UNIT V** **Introduction to AutoCAD** Basic introduction and operational instructions of various commands in AutoCAD.

		28	Revision
15th	20.04.2026 to 24.04.2026	29	**3rd Sessional Test**
		30	Discussion on 3rd Sessional and Assignment
16th	27.04.2026 to 30.04.2026	31	Discussion on important questions
		32	Discussion on important questions

Lesson Plan

Name of the Faculty	**:**	**Ms. Chetna**		
Discipline	**:**	**Electronics and Communication Engg.**		
Semester	**:**	**4th**		
Subject	**:**	**MICROPROCESSOR AND MICRO-CONTROLLERS**		
Lesson Plan Duration	**:**	**16th Weeks(15.01.2026 to 30.04.2026)**		
Work Load (Lecture/ Practical) per week (in hours): 03 T +04 P				
Week	**Date**	**Theory**		
		Lecture day	**Topic (including assignment/ test)**	**Topic**
1st	15.01.2026 to 16.01.2026	1	Unit -1 Introduction to Microprocessors and Microcontrollers Basic Introduction and comparison of Microcomputer, Microprocessor, and Microcontroller,	Introduction to Microprocessors and Microcontrollers
		2	Selection of Microcontroller,Introduction to 8051- History, Architecture	Understand 8051 development board
2nd	19.01.2026 to 22.01.2026	3	Pin Diagram, Crystal Circuit,	Viva
		4	Reset Circuit	
		5	Unit-2 Different Types of Programming languages for 8051 Advantages of Programming in C	Generating Hex File using Keil Compiler
3rd	27.01.2026 to 30.01.2026	6	Addressing Modes	Viva
		7	Instruction Set of 8051	
		8	Types of Instructions	Programming and interfacing of RELAY and Buzzer
4th	02.02.2026 to 06.02.2026	9	Types of Instructions	Viva
		10	Types of Instructions	
		11	Data types and time delay in 8051	Programming to interface switches and LEDs
5th	09.02.2026 to 13.02.2026	12	I/O programming in 8051 C	Viva
		13	Hex file generation using Keil Compiler	
		14	Revision	Revision
6th	16.02.2026 to 20.02.2026	15	**1st Sessional Test**	Revision
		16	Disscussion on 1st Sessional and Assignment	
		17	Unit - 3 8051 Timers Timers and Registers of 8051	Viva
7th	23.02.2026 to 27.02.2026	18	Timers and Registers of 8051	Programming and interfacing of LCD
		19	Timer / Counter logic and modes	
		20	Programming of 8051 timers	Viva
		21	Programming Timer 1 using C	

8th	02.03.2026 to 06.03.2026	22	Unit - 4 Serial Port Communication Serial Port of 8051 –Basics of serial communication,	Programming for A/D converter, result on LCD.
		23	Serial Communication-SCON	Viva
9th	09.03.2026 to 13.03.2026	24	SBUF, Modes of serial communication	Programming for D/A converter, result on LCD
		25	8051 connection to RS232	
		26	Interrupts	Revision
10th	16.03.2026 to 20.03.2026	27	Revision	Revision
		28	**2nd Sessional Test**	
		29	Discussion on 2nd Sessional Test and Assignment	Viva
11th	24.03.2026 to 27.03.2026	30	Unit - 5 Real World Interfacing with 8051 I/O Interfacing – LED Interfacing	Interfacing Stepper Motor with 8051
		31	LCD Interfacing	
		32	Keyboard Interfacing	Viva
12th	30.03.2026 to 03.04.2026	33	Interfacing ADC	Interfacing different sensors with 8051.
		34	Interfacing DAC	
		35	Sensor Interfacing	Revision
13th	06.04.2026 to 10.04.2026	36	Signal Conditioning	Revision
		37	Revision	
		38	Revision	Revision
14th	13.04.2026 to 17.04.2026	39	Revision	Revision
		40	Revision	
		41	Revision	Revision
15th	20.04.2026 to 24.04.2026	42	**3rd Sessional Test**	Viva
		43	Discussion on 3rd Sessional Test and Assignment	
		44	Revision	Revision
16th	27.04.2026 to 30.04.2026	45	Revision	Revision
		46	Revision	
		47	Discussion on Important Questions	Viva

Lesson Plan				
Name of the Faculty	**:**	**Ms. Chetna**		
Discipline	**:**	**Electronics and Communication Engg.**		
Semester	**:**	**4th**		
Subject	**:**	**COMMUNICATION SYSTEMS**		
Lesson Plan Duration	**:**	**16th Weeks(15.01.2026 to 30.04.2026)**		
Work Load (Lecture/ Practical) per week (in hours): 03 T +02 P				

Week	**Date**	**Theory**		
		Lecture day	**Topic (including assignment/ test)**	**Topic**
1st	15.01.2026 to 16.01.2026	1	UNIT I AM/FM Transmitters Classification of transmitters on the basis of modulation, service, frequency and power	To observe the waveforms at different stages of an AM low power transmitter
		2	Block diagram of AM transmitters and working of each stage	
2nd	19.01.2026 to 22.01.2026	3	Block diagram and working principles of reactance FET	Viva
		4	Armstrong FM transmitters	
		5	UNIT II AM/FM Radio Receivers Principle and working with block diagram of super heterodyne AM receiver. Function of each block and typical waveforms at input and output of each block.	
3rd	27.01.2026 to 30.01.2026	6	Performance characteristics of a radio receiver: sensitivity, selectivity, fidelity, S/N ratio	To observe the waveforms at different stages of a Radio Receive.
		7	Image rejection ratio and their measurement procedure	
		8	Concepts of simple and delayed AGC	
4th	02.02.2026 to 06.02.2026	9	Block diagram of an FM receiver, function of each block	Viva
		10	UNIT III Antennas: Electromagnetic spectrum and its various ranges: VLF, LF, MF, HF, VHF, UHF, Microwave	
		11	Physical concept of radiation of electromagnetic energy from a dipole	
5th	09.02.2026 to 13.02.2026	12	Concept of polarization of EM Waves.	To align AM broadcast radio receiver
		13	Revision	
		14	Revision	
6th	16.02.2026 to 20.02.2026	15	**1st Sessional Test**	Viva
		16	Disscussion on 1st Sessional and Assignment	
		17	Definition and physical concepts of the terms used with antennas like point source, gain directivity, aperture, effective area,	
7th	23.02.2026 to 27.02.2026	18	radiation pattern, beam width and radiation resistance, loss resistance	To align the dish antenna
		19	Types of antennas-brief description, characteristics and typical applications of half wave dipole, folded dipole	

		20	brief description, characteristics and typical applications of patch, loop antenna.	
8th	02.03.2026 to 06.03.2026	21	brief description, characteristics and typical applications of Ferrite rod, Yagi antenna, dish antenna.	To identify and study the various types of antennas used in different frequency ranges
		22	UNIT IV Propagation Basic idea about different modes of wave propagation and typical areas of application.	
		23	Ground wave propagation and its characteristics	
9th	09.03.2026 to 13.03.2026	24	Space wave communication – line of sight propagation,standard atmosphere	Viva
		25	Structure of standard atmosphere	
		26	Sky wave propagation - ionosphere and its layers. Explanation of terms - virtual height, critical frequency, skip distance	
10th	16.03.2026 to 20.03.2026	27	Maximum usable frequency, multiple hop propagation	To plot the radiation pattern of a directional and omni directional antenna
		28	Revision	
		29	**2nd Sessional Test**	
11th	24.03.2026 to 27.03.2026	30	Discussion on 2nd Sessional Test and Assignment	Viva
		31	UNIT V Satellite Communication - Basic idea, passive and active satellites	
		32	Meaning of the terms; orbit, apogee, perigee	
12th	30.03.2026 to 03.04.2026	33	Geo-stationary satellite and its need.	To plot the variation of field strength of a radiated wave, with distance from a transmitting antenna.
		34	Block diagram and explanation of a satellite communication	
		35	Introduction to VSAT and its features.	
13th	06.04.2026 to 10.04.2026	36	Revision	To study and rectify different faults in a broadcast radio receiver.
		37	Revision	
		38	Revision	
14th	13.04.2026 to 17.04.2026	39	Revision	Viva
		40	Revision	
		41	Revision	
15th	20.04.2026 to 24.04.2026	42	**3rd Sessional Test**	Revision
		43	Discussion on 3rd Sessional Test and Assignment	
		44	Revision	
16th	27.04.2026 to 30.04.2026	45	Revision	Viva
		46	Revision	
		47	Revision	

LESSON PLAN				
Name of the Faculty	**:**	**Mr. Suresh Kumar**		
Discipline	**:**	**Electronics and Communication Engg.**		
Semester	**:**	**4th**		
Subject	**:**	**POWER ELECTRONICS**		
Lesson Plan Duration	**:**	**16th Weeks(15.01.2026 to 30.04.2026)**		
Work Load (Lecture/ Practical) per week (in hours): 03 T +04 P				
Week	**Date**	**Theory**		
		Lecture day	**Topic (including assignment/ test)**	**Topic**
1st	15.01.2026 to 16.01.2026	1	Role of Power electronics	Introduction of Power electronics Kits
		2	Construction, working principles of SCR, two transistor analogy of SCR, V-I characteristics of SCR	To plot VI characteristic of an SCR
2nd	19.01.2026 to 22.01.2026	3	SCR specifications & ratings	Viva
		4	Different methods of SCR triggering	
		5	Different commutation circuits for SCR	To plot VI characteristics of TRIAC.
3rd	27.01.2026 to 30.01.2026	6	Construction & working principle of DIAC, TRIAC and their V-I characteristics	Viva
		7	Construction, working principle of UJT, V-I characteristics of UJT. UJT as relaxation oscillator.	
		8	Basic idea about the selection of Heat sink for thyristors	To plot VI characteristics of UJT
4th	02.02.2026 to 06.02.2026	9	Application such as light intensity control, speed control of universal motors, fan regulator, battery charger.	Viva
		10	UNIT II Controlled Rectifiers Single phase half wave controlled rectifier with load (R, R-L)	
		11	Single phase half controlled full wave bridge rectifier (R, R-L)	To plot VI characteristics of DIAC.
5th	09.02.2026 to 13.02.2026	12	Single phase fully controlled full wave bridge rectifier.	Viva
		13	Single phase full wave centre tap controlled rectifier	
		14	Revision	To study UJT relaxation oscillator and observe different wave forms
	16.02.2026	15	**1st Sessional Test**	Viva
		16	Disscussion on 1st Sessional and Assignment	

6th	to 20.02.2026	17	UNIT III Principle of operation of basic inverter circuits, series and parallel inverters & their applications.	Viva
7th	23.02.2026 to 27.02.2026	18	Choppers: Introduction, concepts of duty cycle, types of choppers (Class A, Class B, Class C and Class D). Step up and step down choppers.	To observe wave shapes at relevant points in a circuit of single-phase half wave controlled rectifier and effect of change of firing angle.
		19	Dual Converters : Introduction, types & basic working principle of dual converters,applications	
		20	cyclo converters: Introduction, types & basic working principle of dual converters, applications	Viva
8th	02.03.2026 to 06.03.2026	21	Revision	To observe wave shapes and measurement of voltage at relevant points in TRIAC basedAC phase control circuit.
		22	UNIT IV Thyristorised Control of Electric drives a) DC drive control Half wave drives. Full wave drives	
		23	Chopper drives (Speed control of DC motor using choppers)	Viva
9th	09.03.2026 to 13.03.2026	24	b) AC drive control - Phase control - Constant V/F operation	To observe output wave shape in a circuit for single phase full wave controlled rectifier
		25	Cyclo converter/Inverter drives.	
		26	Revision	Viva
10th	16.03.2026 to 20.03.2026	27	**2nd Sessional Test**	To study installation of UPS system and routine maintenance of batteries.
		28	Discussion on 2nd Sessional Test and Assignment	
		29	UNIT V UPS, on-line, off line & its specifications	Viva
11th	24.03.2026 to 27.03.2026	30	Concept of high voltage DC transmission	Visit to any Solar Power Plant
		31	Classification of batteries	
		32	Introduction to solar power plants and their components	Viva
12th	30.03.2026 to 03.04.2026	33	Revision	Revision
		34	Revision	
		35	Revision	Revision
13th	06.04.2026 to 10.04.2026	36	Revision	Revision
		37	Revision	
		38	Revision	Revision
14th	13.04.2026 to 17.04.2026	39	Revision	Revision
		40	Revision	
		41	Revision	Revision
	20.04.2026	42	**3rd Sessional Test**	Revision

15th	to	43	Discussion on 3rd Sessional Test and Assignment	Revision
	24.04.2026	44	Revision	Revision
16th	27.04.2026	45	Revision	Revision
	to	46	Discussion on Important Questions	
	30.04.2026	47	Discussion on Important Questions	Internal Viva

Lesson Plan

Lesson Plan Duration : 15.01.2026 to 30.04.2026 work Load (Lecture) per week (in hours): 02 HOURS (Theory)
Name of the Faculty : Ms. Monika
Discipline : Electronics and Communication Engg.
Subject : MOOCS(TQM) Semester : 4th

Week	Date	Theory	
		Lecture day	Topic (including assignment/ test)
1st	15.01.2026 to 16.01.2026	1	Quality and Total Quality Management: Excellence in manufacturing/service device, factors of excellence, relevance of TQM
		2	Concept and definition of quality: Total quality control(TQC) and Total Quality Management (TQM)
2nd	19.01.2026 to 22.01.2026	3	salient features of TQC and TQM. Total Quality Management Models, benefits of TQM
		4	Just-in-time (JIT): Definition: Elements, benefits, equipment layout for JIT system
3rd	27.01.2026 to 30.01.2026	5	Kanban system MRP (Material Requirement planning) vs JIT system, Waste elimination
		6	workers involvement through JIT: JIT cause and effect chain, JIT implementation
4th	02.02.2026 to 06.02.2026	7	Customer: Satisfaction, data collection and complaint, redressal mechanism
		8	REVISION
5th	09.02.2026 to 13.02.2026	9	REVISION
		10	REVISION
6th	16.02.2026 to 20.02.2026	11	**1st Sessional Test**
		12	Discussion on 1st Sessional and Assignment
7th	23.02.2026 to 27.02.2026	13	Planning Process:Policy development and implementation
		14	plan formulation and implementation
8th	02.03.2026 to 06.03.2026	15	Process Management:Factors affecting process management, Quality function development (QFD), and quality assurance system.
		16	Total Employees Involvement (TEI): Empowering employees: team building; quality circles; reward and Recognition; education and training, Suggestion schemes
	09.03.2026	17	REVISION

$_{9}$**th**	to 13.03.2026	**18**	Problems solving:Defining problem, Problem identification and solving process, QC tools.
$_{10}$**th**	16.03.2026 to 20.03.2026	**19**	**2nd Sessional Test**
		20	Discussion on 2nd Sessional and Assignment
$_{11}$**th**	24.03.2026 to 27.03.2026	**21**	Benchmarking: Definition, concept, process and types of benchmarking
		22	Quality Systems: Concept of quality system standards: relevance and origin of ISO 9000; Benefits; Elements of ISO 9001, ISO 9002, ISO 9003
$_{12}$**th**	30.03.2026 to 03.04.2026	**23**	Advanced techniques of TQM: Design of experiments: failure mode effect analysis
		24	Taguchi methods
$_{13}$**th**	06.04.2026 to 10.04.2026	**25**	REVISION
		26	REVISION
$_{14}$**th**	13.04.2026 to 17.04.2026	**27**	REVISION
		28	REVISION
$_{15}$**th**	20.04.2026 to 24.04.2026	**29**	**3rd Sessional Test**
		30	Discussion on 3rd Sessional and Assignment
$_{16}$**th**	27.04.2026 to 30.04.2026	**31**	REVISION
		32	REVISION

LESSON PLAN

Lesson Plan Duration : 16 weeks (15 Jan 2026 to 30 April 2026)
Work Load (Lecture) per week (in hours): 03 HOURS (Theory)+04 HOURS (Practical)
Name of the Faculty : Ms. Anju
Discipline : Electronics and Communication Engg.
Subject : CN Semester : 6th

Week	Date	Theory		Practical
		Lecture day	Topic (including assignment/ test)	Topic
1st	15.01.2026 to 16.01.2026	1	Unit 1. • Concept of network • Models of network computing	Introduction of Computer Network devices
		2	• Networking models • Peer-to–peer Network • Client-Server Network	
2nd	19.01.2026 to 22.01.2026	3	• LAN,MAN and WAN • Network Services	Recognize the physical topology and cabling(coaxial,OFC,UTP,STP) of a network.
		4	• Topologies	
		5	• Switching Techniques NETWORKING MODELS • OSI model:Definition,	Revision
3rd	27.01.2026 to 30.01.2026	6	Layered Architecture of OSI Model • Functions of Physical layer and Data Link Layer	Recognition and use of various types of connectors RJ-45, RJ-11, BNCand SC ST
		7	• Functions of Network Layer,Transport Layer and Presentation Layer	
		8	• Functions of Session layer, Application Layer	Revision
4th	02.02.2026 to 06.02.2026	9	• TCP/IPModel Functions of TCP/IP layers	Making of cross cable and straight cable
		10	Comparison between OSI and TCP/IP model UNITII - TCP/IPADDRESSING • Concept of physical addressing	
		11	• Concept of Logical addressing • IPV4 addresses– Address space, Notations	Revision
5th	09.02.2026 to 13.02.2026	12	• Classful Addressing-Different IP address classes,Classes & Blocks, Net-id & Host-Id, Masks, Address depletion	Install and configure a network interface card in a workstation.
		13	• Classless Addressing–Address blocks,Masks • Special IP Addresses • Subnetting and Supernetting	

		14	• Loop back concept • Network Address Translation	Revision
6th	16.02.2026 to 20.02.2026	**15**	Revision	Revision and Viva
		16	**1st Sessional Test**	
		17	Discussion on 1st Sessional and Assignment	Revision
7th	23.02.2026 to 27.02.2026	**18**	• IPV4 Header	Identify the IP address of a workstation and the class of the address and configure the IP Address on a workstation
		19	• IPV6 Header • Comparison between IPV4 and IPV6	
		20	Unit III Ethernet Specification and Standardization 10 Mbps (Traditional Ethernet) 100 Mbps (Fast Ethernet)	Revision
8th	02.03.2026 to 06.03.2026	**21**	1000 Mbps (Gigabit Ethernet) Network connectivity Devices,	Managing user accounts in windows.
		22	NICs,Hubs,Switches,	
		23	Routers,Repeaters,Modem,	Revision
9th	09.03.2026 to 13.03.2026	**24**	Gateway,Configuration of Routers & Switches	Sharing of Hardware resources in the network.
		25	UNITIV NETWORK ADMINISTRATION •Network Security Principles	
		26	• Cryptography using secure protocols • DHCP Server	Revision
10th	16.03.2026 to 20.03.2026	**27**	Revision	Revision and Viva
		28	**2nd Sessional Test**	
		29	Discussion on 2nd Sessional and Assignment	Revision
11th	24.03.2026 to 27.03.2026	**30**	• TroubleShooting Tools:PING, IPCONFIG,IFCONFIG	Use of Netstat and its options.
		31	NETSTAT, TRACEROOT,	
		32	Wireshark, Nmap, TCPDUMP, ROUTEPRINT	Revision
12th	30.03.2026 to 03.04.2026	**33**	• Workgroup/Domain Networking	Connectivity troubleshooting using PING, IPCONFIG, IFCONFIG
		34	UNIT V INTRODUCTION TO WIRELESS NETWORKS • Introduction to wireless LAN IEEE 802.11,	
		35	WiMax ad Li-Fi	Revision
13th	06.04.2026 to	**36**	• Wireless Security	Installation of Network Operating System(NOS)
		37	• Introduction to bluetooth-architecture, application • Comparison between bluetooth and Wifi,	

	10.04.2026	**38**	CLOUD COMPUTING • Definition of Cloud Computing and advantages of Cloud Computing.	Revision
14th	13.04.2026 to 17.04.2026	**39**	• Cloud Computing service model-SaaS,PaaS,Iaas.	Demonstration of Cloud Computing in Lab sorusing Online Videos.
		40	• Deployment model-Private Cloud, Public Cloud,Hybrid,Community cloud.	
		41	Revision	Revision
15th	20.04.2026 to 24.04.2026	**42**	**3rd Sessional Test**	Revision
		43	Discussion on 3rd Sessional Test and Assignment	
		44	Discussion on Important Questions	Revision
16th	27.04.2026 to 30.04.2026	**45**	Revision	Revision
		46	Revision	
		47	Revision	Internal Viva

LESSON PLAN

Lesson Plan Duration : 16 weeks (15.01.2026 to 30.04.2026)
Work Load (Lecture) per week (in hours): 02 HOURS (Theory)+02 HOURS (Practical)
Name of the Faculty : Ms. Anju
Discipline : Electronics and Communication Engg.
Subject : MRE Semester : 6th

Week	Date	Theory		Practical
		Lecture day	Topic (including assignment/ test)	Topic
1st	15.01.2026 to 16.01.2026	1	UNIT I INTRODUCTION Introduction to microwaves and its applications,	Introduction of Microwave Kits
		2	Classification on the basis of its frequency bands (HF, VHF, UHF, L, S, C, X, Ku, Ka, Sub mm).	
2nd	19.01.2026 to 22.01.2026	3	MICROWAVE DEVICES Construction,characteristics,operating principles and typical applications of Reflex klystron	To measure electronics and mechanical tuning range of a reflex klystron
		4	Construction,characteristics,operating principles and typical applications of Magnetron	
3rd	27.01.2026 to 30.01.2026	5	Construction,characteristics,operating principles and typical applications of Traveling wave tube	Viva
		6	Construction,characteristics,operating principles and typical applications of Gunn diode	
4th	02.02.2026 to 06.02.2026	7	Construction,characteristics,operating principles and typical applications of Impatt diode	To measure VSWR of a given load
		8	UNIT II Introduction of Wave guides Rectangular and circular wave guides and their applications	
5th	09.02.2026 to 13.02.2026	9	Mode of wave guide; Propagation constant of a rectangular wave guide	Viva
		10	cut off wavelength, guide wavelength and their relationship with free space wavelength (no mathematical derivation)	
6th	16.02.2026 to 20.02.2026	11	**1st Sessional Test**	To measure the Klystron frequency by slotted section method
		12	UNIT III Microwave Components Constructional features, characteristics and application of tees, bends	

7th	23.02.2026 to 27.02.2026	**13**	matched termination,twists, detector, mount	Viva
		14	slotted section, directional coupler, fixed and variable attenuator	
8th	02.03.2026 to 06.03.2026	**15**	isolator, circulator and horn antenna	To measure the directivity and coupling of a directional coupler
		16	Revision	
9th	09.03.2026 to 13.03.2026	**17**	UNIT IV Microwave Communication systems Block diagram and working principles of microwave communication link	Viva
		18	Troposcatter Communication-basic idea	
10th	16.03.2026 to 20.03.2026	**19**	**2nd Sessional Test**	To plot radiation pattern of a horn antenna in horizontal and vertical planes
		20	UNIT V Radar Systems Introduction to radar, its various applications	
11th	24.03.2026 to 27.03.2026	**21**	radar range equation (no derivation)	To verify the properties of magic tee
		22	Block diagram and operating principles of basic pulse radar,Concepts of ambiguous range	
12th	30.03.2026 to 03.04.2026	**23**	radar area of cross-section and its dependence on frequency	Viva
		24	Block diagram and operating principles of CW (Doppler) radars, and their applications	
13th	06.04.2026 to 10.04.2026	**25**	Block diagram and operating principles of MTI radar	To study isolator and circulator
		26	Radar display- PPI	
14th	13.04.2026 to 17.04.2026	**27**	Revision	To study the attenuators (fixed and variable)
		28	Revision	
15th	20.04.2026 to 24.04.2026	**29**	**3rd Sessional Test**	Revision
		30	Revision	
16th	27.04.2026 to 30.04.2026	**31**	Revision	Internal Viva
		32	Revision	

LESSON PLAN			
Lesson Plan Duration :16 weeks (15 Jan 2026 -30 April 2026) **Work Load (Lecture) per week (in hours): 03 HOURS (Theory)** **Name of the Faculty : Mr. Suresh Kumar** **Discipline : Electronics and Communication Engg.** **Subject : EDM Semester : 6th**			
Week	**Date**	**Theory**	
		Lecture	**Topic (including assignment/ test)**
1st	15.01.2026 to 16.01.2026	**1**	UNIT I Entrepreneurship: Concept and definitions, classification and types of entrepreneurs
		2	entrepreneurial competencies, Traits / Qualities of entrepreneurs, manager v/s entrepreneur
2nd	19.01.2026 to 22.01.2026	**3**	role of Entrepreneur, barriers in entrepreneurship
		4	Sole proprietorship and partnership forms of business Organisations,
		5	small business vs startup, critical components for establishing a start-up
3rd	27.01.2026 to 30.01.2026	**6**	Leadership: Definition and Need, Manager Vs leader, Types of leadership
		7	UNIT II Definition of MSME (micro, small and medium enterprises), significant provisions of MSME Act
		8	importance off easibility studies,technical,marketing and finance related problems faced by new enterprises
4th	02.02.2026 to 06.02.2026	**9**	major labor issues in MSMEs and its related laws, Obtaining financial assistance through various government schemes like Prime Minister Employment Generation Program(PMEGP)
		10	Pradhan Mantri Mudra Yogna(PMMY),Make in India,Start up India
		11	Stand up India , National Urban Livelihood Mission (NULM); Schemes of assistance by entrepreneurial support agencies at National, State
5th	09.02.2026 to 13.02.2026	**12**	District level: NSIC, NRDC, DC:MSME, SIDBI, NABARD, Commercial Banks, SFC's TCO, KVIB, DIC,
		13	Technology BusinessIncubator (TBI) and Science and Technology Entrepreneur Parks (STEP)
		14	Revision
6th	16.02.2026 to 20.02.2026	**15**	**1st Sessional Test**
		16	Disscussion on 1st Sessional Test and Assignment
		17	UNIT III NATURE AND FUNCTIONS OF MANAGEMENT: Definition, Nature of Management, Management as a Process, Management as Science and Art

$_{7}$th	23.02.2026 to 27.02.2026	**18**	Management Functions, Management and Administration, Managerial Skills,Levels of Management; Leadership
		19	PLANNING AND DECISION MAKING: Planning and Forecasting - Meaning and definition, Features
		20	Steps in Planning Process, Approaches, Principles, Importance, Advantages and Disadvantages of Planning
$_{8}$th	02.03.2026 to 06.03.2026	**21**	Types of Plans, Types of Planning, Management by Objective. Decision Making-Meaning, Characteristics
		22	UNIT IV ORGANISING AND ORGANISATION STRUCTURE: Organising Process - Meaning and Definition, Characteristics Process, Need and Importance,Principles, Span of Management,
		23	Organisational Chart - Types, Contents, Uses, Limitations, Factors Affecting Organisational Chart.
$_{9}$th	09.03.2026 to 13.03.2026	**24**	STAFFING: Meaning, Nature, Importance, Staffing process. Manpower Planning, Recruitment, Selection, Orientation and Placement, Training, Remuneration
		25	CONTROLLING AND CO-ORDINATION Controlling - Meaning, Features, Importance, Control Process
		26	Characteristics of an effective control system,Types of Control.Co-ordination- characteristics, essentials
$_{10}$th	16.03.2026 to 20.03.2026	**27**	**2nd Sessional Test**
		28	Discussion on 2nd Sessional Test Test and Assignment
		29	UNIT V Market Survey and Opportunity Identification
$_{11}$th	24.03.2026 to 27.03.2026	**30**	Scanning of business environment
		31	Assessment of demand and supply in potential areas of growth, Project report Preparation
		32	Detailed project report including technical
$_{12}$th	30.03.2026 to 03.04.2026	**33**	economic and market feasibility, Common errors in project report preparations
		34	Exercises on preparation of project report
		35	Revision
$_{13}$th	06.04.2026 to 10.04.2026	**36**	Revision
		37	Revision
		38	Revision
$_{14}$th	13.04.2026 to 17.04.2026	**39**	Revision
		40	Revision
		41	Revision
	20.04.2026	**42**	**3rd Sessional Test**

15th	to 24.04.2026	**43**	Discussion on 3rd Sessional Test and Assignment
		44	Discussion on important questions
16th	27.04.2026 to 30.04.2026	**45**	Revision
		46	Revision
		47	Revision

LESSON PLAN

Lesson Plan Duration : 16 weeks (15.01.2026 to 30.04.2026)
Work Load (Lecture) per week (in hours): 02 HOURS (Theory)+02 HOURS (Practical)
Name of the Faculty : Ms. Chetna
Discipline : Electronics and Communication Engg.
Subject : ES Semester : 6th

Week	Date	Theory		Practical
		Lecture day	Topic (including assignment/ test)	Topic
1st	15.01.2026 to 16.01.2026	1	UNIT I Introduction of Embedded system, history of embedded systems	Introduction of Embedded System software
		2	embedded system architecture	
2nd	19.01.2026 to 22.01.2026	3	Functional structure of embedded system	Performing experiments on PIC microcontroller kits
		4	UNIT II PIC Microcontroller Introduction to PIC Microcontroller: History and Features	
3rd	27.01.2026 to 30.01.2026	5	Architecture of PIC Microcontroller	Viva
		6	Pin Diagram of PIC18F458	
4th	02.02.2026 to 06.02.2026	7	I/O port pins and their functions	Interfacing LCD and keyboard with PIC microcontroller
		8	PIC18 Configuration Registers	
5th	09.02.2026 to 13.02.2026	9	UNIT III PIC Programming in C:Data types and time delays in C	Viva
		10	I/O Programming in C	
6th	16.02.2026 to 20.02.2026	11	**1st sessional test**	Interface PIC microcontroller with Sensors
		12	Discussion on 1st Sessional and Assignment	
7th	23.02.2026 to 27.02.2026	13	Logic operations in C, Data conversion programs in C	Viva
		14	Data serialization in C, Program ROM allocation in C18	
8th	02.03.2026 to 06.03.2026	15	Data RAM allocation in C18,PIC18 timer programming in C,	Interface PIC microcontroller with stepper motor
		16	PIC18 serial port programming in C	
9th	09.03.2026 to	17	UNIT IV Real World Interfacing with PIC18: LCD and keyboard Interfacing	Viva

	13.03.2026	**18**	ADC Interfacing,DAC and Sensor Interfacing	
10th	16.03.2026 to 20.03.2026	**19**	**2nd sessional test**	Viva
		20	Discussion on 2nd Sessional and Assignment	
11th	24.03.2026 to 27.03.2026	**21**	UNIT V Motor Control Using PIC 18: Relays and optoisolators	Control speed of DC motor using PIC microcontroller
		22	Stepper motor Interfacing with PIC18	
12th	30.03.2026 to 03.04.2026	**23**	DC Motor Interfacing with PIC18	Viva
		24	Revision	
13th	06.04.2026 to 10.04.2026	**25**	Revision	Development of a complete system using PIC microcontroller
		26	Revision	
14th	13.04.2026 to 17.04.2026	**27**	Revision	Viva
		28	Revision	
15th	20.04.2026 to 24.04.2026	**29**	**3rd sessional test**	Viva
		30	Discussion on 3rd Sessional and Assignment	
16th	27.04.2026 to 30.04.2026	**31**	Revision	Viva
		32	Discussion on important questions	