Government Polytechnic Panchkula, Sector 26		
Name of Faculty: Dr. Sunita Saini		
Discipline: Electronics and Communication Engg.		
Semester: 6th		
Subject: Embedded System		
Lesson Plan Duration: 15 Weeks		
Week	**Theory**	
	Lecture Day	**Topic**
Week 1	**Day 1**	**Unit1: Introduction**
	Day 2	1.1 Embedded system.
Week 2	**Day 3**	1.2 History of embedded systems .
	Day 4	1.3 Embedded system architecture.
Week 3	**Day 5**	1.4 Functional structure of embedded system
	Day 6	**Unit 2 PIC Microcontroller**
Week 4	**Day 7**	2.1 Introduction to PIC Microcontroller: History and Features
	Day 8	2.2 Architecture and PIN Diagram of PIC18F458
Week 5	**Day 9**	Sessional 1
	Day 10	2.3 I/O port pins and their functions and PIC18 Configuration Registers
Week 6	**Day 11**	**Unit 3: PIC programming in C**
	Day 12	3.1 Data types and time delays in C
Week 7	**Day 13**	3.2 I/O programming in C
	Day 14	3.3 Data conversions programs in C
Week 8	**Day 15**	3.4 Data serialization in c
	Day 16	3.5 Program ROM allocation in C18
Week 9	**Day 17**	Sessional 2
	Day 18	3.6 Data Ram ALLOCATION IN C
Week 11	**Day 19**	3.7 PIC18 Timer programming in C
	Day 20	3.8 PIC18 serial port programming in C
Week 12	**Day 21**	**UNIT 4: Real world interfacing with PIC18**
	Day 22	4.1 LCD, Keyboard and ADC Interfacing
Week 13	**Day 23**	4.2 DAC and Sensor interfacing
	Day 24	**Unit 5: Motor control unit using PIC**
Week 14	**Day 25**	5.1 Relays and opt isolators

	Day 26	5.2 Stepper motor interfacing with PIC18 and DC motor interfacing with PIC18
Week 15	Day 27	Sessional 3
	Day 28	Revision and assessment

LessonPlan

Name of Faculty: Ms. Sujata
Discipline: Electronics and Communication Engineering
Semester: 6th sem
Subject: computer network

Lesson Plan Duration: 15 weeks (19th Jan. to 30th April 2026)
Work Load (lectures per week (in hours)): Lectures- 03

Week	Lecture Day	Theory
		Topic (Including Assignment/ Test)
1st	1	Computer network, computer network model, topologies
	2	Computer network type , switching techniques
	3	Brief introduction of osi model , function of each layer of osi model
2nd	1	Brief introduction of TCP IP MODEL, function of each layer of TCP IP MODEL
	2	Difference between osi MODEL and TCP IP MODEL
	3	Rewised all topics which covered in lecture
3rd	1	Give1st assignment topic
	2	Client server,peer to peer model
	3	Lan,man,wan in detail
4th	1	Model of computer network
	2	Minor test of unit1
	3	Check 1st assignment
5th		**1st Sessional Tests (Tentative)**
6th	1	TCP/IP address brief introduction,IP4,ip6 overview
	2	Concept of physical and logica addressing , class full address , different ip address classes
	3	Host id mask, address depilation , subnetting and supernetimg
7th	1	Network address translation, comparison between IP4 and ip6
	2	Ethernet specification and standardization
	3	Network connectivity device,nic,hub
8th	1	Switch, router, repeator,modem,

	2	Gateway , configure of. Router and switch
	3	Revision of unit2,3
9th		**2nd Sessional Tests (Tentative)n**
10th	1	Introduction of network administration, network security principal, cryptography
	2	Using secure protocol,ping,ipconfq,traceroot,wirshark
	3	Nmap,routerprint,tcpudmp,
11th	1	DHCP server
	2	Wireless LAN, IEEE 802.11
	3	Wi-max and lo-fi, wireless security, introduction bluetooth
12th	1	Comparison between bluetooth and wifi
	2	Cloud computing, cloud computing services
	3	Cloud computing advantage
13th	1	Cloud computing model,saas,paas,iaas
	2	Deployment model
	3	Private cloud, public cloud, connectivity cloud
14th		**3rd Sessional Test (Tentative)**
15th	1	Revision 5th unit
	2	Revision and Practice

LessonPlan

Name of Faculty: Ms. Sujata
Discipline: Electronics and Communication Engineering
Semester: 6th sem
Subjet: EDM

Lesson Plan Duration: 15 weeks (19th Jan. to 30th April
2026)
Work Load (lectures per week (in hours)): Lectures- 03

Week	Lecture Day	Theory
		Topic (Including Assignment/ Test)
1st	1	Introduction of entrepreneurship, defination of enterpeenur, classification of entrepreneurship, quality of enterpeenur, manager vs enterpreneur
	2	Barrier in entrepreneurship, leadership, defination of leadership, manager vs leader
	3	Rewised all 1st unit which covered in lecture
2nd	1	Types of leadership, partnerships, role of partnership,,sole of properties
	2	Definitions of msme,nrdc,all gov scheme
	3	Rewised all topics which covered in lecture
3rd	1	TBI,STEP, major labour issues
	2	Pmegp,pmmy,nulm,pmegp
	3	Rewised all 1st and 2nd unit
4th	1	Minor test of unit 1
	2	Minor test of unit 2
	3	Check 1st assignment
5th		**1st Sessional Tests (Tentative)**
6th	1	Nature of function of management, management as process, management as science
	2	Management functions, management and administrationanagerail skills, levels of management
	3	Planning and decision making, step in planning process, types of planning
7th	1	Rewised 3rd unit topic which covered in class room
	2	Management as objective, decision making,
	3	Decison making principal, planning and forecasting

8th	1	Minor test of half unit of 3rd unit
	2	Minor left half unit test
	3	Check assignment
9th		**2nd Sessional Tests (Tentative)**
10th	1	Organization Structure, organising process
	2	Organization chart and it's type and factor
	3	Organization principal, Span of management
11th	1	Staffing meaning, nature, important, staffing process.
	2	Recruitment, selection, placement, training remuneration
	3	Controlling and co-ordination, controlling,typyof controlling
12th	1	Market survey and opportunities, identification
	2	Assessment of demand and supply in potinal area of growth
	3	Economic and market feasibility
13th	1	Exersise on preparation of project reprt
	2	Minor test
	3	Assignment check
14th		**3rd Sessional Test (Tentative)**
15th	1	Revision 2unit
	2	Revision and Practice

Lesson Plan

Name of Faculty: Ms. Divya Chopra
Discipline: Electronics and Communication Engineering
Semester: 4th
Subject: MICROWAVE AND RADAR ENGINEERING

Lesson Plan Duration: 15 weeks (15th Jan. to 30th April 2026)
Work Load (lectures/Practical) per week (in hours): Lectures- 02, Practical- 02

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignments)	Working week	Topic
1st	1	Introduction to microwaves, need, advantages, limitations, applications	1	To measure electronics and mechanical tuning range of a reflex klystron
	2	Microwave frequency bands – HF, VHF, UHF, L, S, C, X, Ku, Ka, Sub-mm		
2nd	1	Reflex klystron – construction, characteristics, applications	2	To measure VSWR of a given load.
	2	Magnetron – construction, operating principle, applications		
3rd	1	Traveling Wave Tube (TWT) – construction, operation, applications	3	To measure the Klystron frequency by slotted section method
	2	Gunn diode and IMPATT diode – operating principles and applications		
4th	1	Revision/Assignment	4	Revision and Practice.
	2	Evaluation of Students by taking Class Test.		
5th		**1st Sessional Tests (Tentative)**	5	Viva-Voce
6th	1	Waveguide: Introduction, Modes; Propagation of waves in Waveguide.	6	To measure the directivity and coupling of a directional coupler.
	2	Rectangular waveguides – construction, applications, modes of propagation.		
7th	1	Circular waveguides – construction, applications, comparison	7	To plot radiation pattern of a horn antenna in horizontal and vertical planes.
	2	Concept of Propagation constant, cutoff wavelength		
8th	1	Guide wavelength and relation with free-space wavelength	8	Revision & Practice
	2	Revision/Assignment		
9th		**2nd Sessional Tests (Tentative)**	9	Viva -Voce
10th	1	Tees (E-plane, H-plane, magic tee) – construction and applications	10	To verify the properties of magic tee.
	2	Bends, twists, matched termination		
11th	1	Detector mount, slotted line section.	11	To study isolator and circulator.
	2	Directional coupler – construction, characteristics, applications		
12th	1	Fixed and variable attenuators; Isolator and Circulator	12	Revision and Practice
	2	Horn antenna – construction, radiation pattern, applications		

13th	1	Block diagram and working principles of microwave communication link, Troposcatter Communication.	13	To study the attenuators (fixed and variable)
	2	Radar basics, applications, radar range equation (concept only) Pulse radar – block diagram and operating principles.		
14th	1	**3rd Sessional Test (Tentative)**	14	Assessment of students
	2	Concepts of ambiguous range, radar area of cross-section and its dependence on frequency. CW (Doppler) radar – block diagram, operation, applications		
15th	1	MTI radar – block diagram and principles; Radar displays – PPI and its features.	15	Revision and Practice