## LESSON PLAN

Name : Er. Kawaljeet Singh

Discipline : ECE

Semester :  $6^{th}$ 

Subject : Wireless and Mobile Communication

Lesson Plan duration : 13 weeks (Jan. 2018 to April 2018)

Week		Theory		Practical	
	Lecture Day	Topic	Practical Day		
1 <sup>st</sup>	1	Wireless communication Basics Advantages of wireless communication	Day 1 <sup>st</sup>	Study the features, specification and working of cellular	
	2	Application of wireless communication		mobile	
	3	Electromagnetic waves & uses			
	4	Frequency Spectrum used			
2 <sup>nd</sup>	5	Paging system & working	2 <sup>nd</sup>	Signal strength	
	6	Cordless Telephone System		measurement of	
	7	Cellular Telephone System		various points from	
	8	Comparison of above wireless communication systems		a transmitting antenna/cordless phone	
3 <sup>rd</sup>	9	Revise Unit 1 Topic	3 <sup>rd</sup>	Observing call	
	10	Cellular telephone system Introduction		processing of GSM trainer Kit	
	11	First Generation & Second Generation			
	12	Third Generation Introduction			
4 <sup>th</sup>	13	4 <sup>th</sup> Generation of cellular telephone system	4 <sup>th</sup>	Visit of a Mobile Switching	
	14	Test unit 1 topic	7	Centre(MSC)	
	15	Cell area (Cellular Concept)	7		
	16	Capacity of cell	7		
5 <sup>th</sup>	17	Frequency Response	5 <sup>th</sup>	Demonstration of	
	18	Co-channel Interference	7	Base Trans	
	19	Adjacent channel Interference	7	Receiver(BTS) with	
	20	Power Control for reducing Interference		nearby cellular tower	
6 <sup>th</sup>	21	Cell Splitting	6 <sup>th</sup>	Observing call processing of	
	22	Cell Sectoring		processing or	

	23	Repeater for Range Extension		CDMA trainer Kit
	24	Assignment -1		
7 <sup>th</sup>	25	Multiple Access Techniques for	7 <sup>th</sup>	Pairing of two
		Wireless Communication		devices using
	26	FDMA & ITS FEATURES		Bluetooth
	27	Time Division Multiple Access		
	28	Code Division Multiple Access		
8 <sup>th</sup>	29	Spread Spectrum Multiple Access	8 <sup>th</sup>	Data transfer using
	30	Frequency Hopping spread		WI-FI Instructional
		Spectrum		
	31	Comparison of		
		FDMA/TDMA/CDMA		
	32	Frequency Division Multiple		
		Access		
9 <sup>th</sup>	33	Time Division Multiple Access		
	34	Test of Unit 3 Topic		
	35	Introduction of GSM		
	36	Architecture of GSM		
10 <sup>th</sup>	37	GSM Operation		
	38	GSM –User Services		
	39	CDMA System		
	40	Comparison of GSM & CDMA		
11 <sup>th</sup>	41	GPRS		
	42	GPRS Classes		
	43	GPS System		
	44	Blue tooth & Operation		
12 <sup>th</sup>	45	Introduction to WI-FI		
	46	Assignment-2		
	47	Test Of GSM & CDMA		
	48	Basic Block Diagram of Digital and		
		Data Communication System.		
13 <sup>th</sup>	49	Analog & Digital Signal		
	50	Analog System		

## LESSON PLAN

Name : Er. Navneet Singh

Discipline : ECE

Semester :  $6^{th}$ 

Subject : Medical Electronics

Lesson Plan duration : 13 weeks (Jan. 2018 to April 2018)

Week		Theory	Practical		
	Lecture	Topic	Practical		
	Day	•	Day 1 <sup>st</sup>		
1 <sup>st</sup>	1	Anatomy and physiology	1 <sup>st</sup>	To operate and	
	2	Elementary ideas of cell structure		feminization with:	
	3	Heart and circulatory system.		a) B.P. Apparatus	
	4	Central nervous system		b) ECG Machine	
2 <sup>nd</sup>	5	Muscle action	2 <sup>nd</sup>	To measure the	
	6	Respiratory system		concentration of	
	7	Body temperature and reproduction system		blood sugar with Glucometer (fasting,	
	8	Medical Electronics Equipments classification		P.P., Random)	
3 <sup>rd</sup>	9	application and specifications of diagnostic	3 <sup>rd</sup>	To measure the a) Respiration rate	
	10	therapeutic and clinical laboratory equipment		b) Pulse rate	
	11	Method of operation Medical Electronics Equipments			
	12	Revision of unit -1			
4 <sup>th</sup>	13	Electrodes	4 <sup>th</sup>	Installation of small	
	14	Test/Assignment-1		medical equipment	
	15	Electrode tissue interface,		in laboratories of	
	16	Bioelectric signals, Bio electrodes, Electrode,		Hospital precautions to be taken	
5 <sup>th</sup>	17	Types of Electrodes	5 <sup>th</sup>	Study of large	
	18	Electrodes used for ECG , EEG		medical equipment	
	19	Transducers & operation		in Hospital / Nursing	
	20	Typical signals from physiological parameters,		home	
6 <sup>th</sup>	21	Pressure transducer	6 <sup>th</sup>	Operation and use of Electro-	
	22	Flow transducer		physiotherapy	
	23	Temperature transducer		priyolotilolapy	
	24	Pulse sensor			
7 <sup>th</sup>	25	Respiration sensor	7 <sup>th</sup>	Maintenance	
	26	Block diagram of ECG Machine		schedule for	
	27	Continued		different equipment	
	28	Application of ECG Machine		and their records in	

			a hospital
8 <sup>th</sup>	29	Block diagram of EEG Machine	·
	30	Continued	
	31	Application of EEG Machine	
	32	Block Diagram of EMG Machine	
9 <sup>th</sup>	33	Continued	
	34	Application of EMG Machine	
	35	Test/Assignment-2	
	36	Heart Rate Measurement	
10 <sup>th</sup>	37	Continued	
	38	Pulse Rate Measurement	
	39	Continued	
	40	Respiration Rate Measurement	
11 <sup>th</sup>	41	Continued	
	42	Blood Pressure Measurement	
	43	Continued	
	44	Principle of defibrillator and	
		pace mark	
12 <sup>th</sup>	45	Use of Microprocessor in patent	
		monitoring	
	46	Test/Assignment-3	
	47	Gross Current Shock	
	48	Micro Current Shock	
13 <sup>th</sup>	49	Special design from safety	
		consideration	
	50	Safety Standards	

## LESSON PLAN

Name : Er. Sandeep kumar

Discipline : ECE

Semester :  $6^{th}$ 

Subject : MOCS

Lesson Plan duration : 12 weeks (Jan. 2018 to April 2018)

Week	Theory			Practical		
	Lectur	Topic	Practic			
	e Day		al Day			
1 <sup>st</sup>	1	Mother Board	1 <sup>st</sup>	Operation, Maintenance,		
		Introduction to different type of		Installation and Testing		
		mother boards		Monitors (LCD and LED)		
	2	Single Board Based System,				
	3	Block				
		diagram of motherboard				
	4	Installation of Computer System				
2 <sup>nd</sup>	5	Buses and Ports Introduction	2 <sup>nd</sup>	Operation, Maintenance,		
_	6	Different type of Buses PCI,	_ 	Installation and Testing		
	7	SCSI and Serial and Parallel ports	-	HDD, Partitioning and		
	8	LPTI, USB. RS 232 C	_	Formatting		
3 <sup>rd</sup>	9	use of computer for	3 <sup>rd</sup>	Operation, Maintenance,		
		instrumentation		Installation and Testing		
	10	Assignment 1	-	DOT Matrix Printer		
	11	Test 1	-			
	12	Memory, Principle of Hard Disk	-			
		Drive				
4 <sup>th</sup>	13	Construction of Hard Disk Drive .	4 <sup>th</sup>	Operation, Maintenance,		
	14	Floppy Disk Controller	-	Installation and Testing		
	4.5		_	Laser Printer		
	15	Hard Disk Controller	-			
<b>–</b> th	16	Pen Drives revision of HDD	<b>–</b> th			
5 <sup>th</sup>	17	common faults with hard disk drive	5 <sup>th</sup>	Installation of Mother		
	18	Common faults with floppy disk		board based on latest		
	40	drive RAM Module.		microprocessor and		
	19	Block Diagram of keyboard Controller		chipset CMOS Set up		
	20	keyboard switches, keyboard		-		
		Reyseard emieries, Reyseard				
6 <sup>th</sup>	21	Mouse and its types	6 <sup>th</sup>	Operation, Maintenance,		
	22	common faults with mouse and	-	Installation and Testing		
		optical mouse		DVD-ROM/DVD Writer		
	23	Introduction to scanner, digitizer	-			
	24	Test 2/Assignment 2	-			
7 <sup>th</sup>	25	CRT Block Diagram	7 <sup>th</sup>	Identification of		
,	26	Principle of operation of Computer	<b>'</b>	Connectors and Cables		
		Monitor		Commoder and Capito		
	27	Difference between TV and	1			
		Z STOTIOG DOLLTOON TV GITG	I			

		Computer Monitor, introduction to		
		· · · · · · · · · · · · · · · · · · ·		
	20	solid state displays	-	
	28	Video display Adaptors		
a th		(monochrome and Colour)	th	
8 <sup>th</sup>	29	Printing Mechanism, Construction	8 <sup>th</sup>	Operation of MODEM
		Dot Matrix Printer		/ROUTER/SWITCH
	30	working principles of Dot Matrix		
		Printer		
	31	Inkjet Printer		
	32	Laser Printer		
9 <sup>th</sup>	33	Printer Controller	9 <sup>th</sup>	Installation of any
	34	Centronics Interface, Signals from		operating system
		PC to Printer and Printer to PC.		
	35	Introduction Networking Devices		
	36	Idea about LAN, WAN		
10 <sup>th</sup>	37	Idea about Wi-Fi, WLAN	10 <sup>th</sup>	Establish LAN,WLAN,
	38	ROUTER,		using Networking
	39	SWITCH	]	Devices
[	40	HUB		
11 <sup>th</sup>	41	Need and functions of modems	11 <sup>th</sup>	Study of LAPTOP, IPAD,
	42	Modems: Need of modems		Smart Phone
	43	functions of modems		
	44	Laptop: Their need,		
12 <sup>th</sup>	45	Test/assignment 3		
[ [	46	function and applications of laptop		
[	47	Revision of unit 6 <sup>th</sup>		
	48	Revision of unit 4 <sup>th</sup>		

## **Lesson Plan**

Name of the Faculty : Mr. .Sanjeev Kumar

Discipline : Electronics and communication Engineering

Semester :  $6^{\text{th}}$ 

Subject : ENTREPRENEURSHIP DEVELOPMENT AND

**MANAGEMENT** 

Lesson Plan duration : 15 weeks (from January, 2018 to April, 2018)

Work load per week : Lecture -03

Week	Theory			
	Lecture Topic			
	Day	(Including assessment/test)		
1 st	1 st	Introduction: Concept /Meaning and need of entrepreneurship		
	2 <sup>nd</sup>	Qualities and functions of entrepreneur and barriers in entrepreneurship		
	3rd	Sole proprietorship and partnership forms of business organization		
2 <sup>nd</sup>	4 <sup>th</sup>	Schemes of assistance by entrepreneurial support agencies at National level organization		
	5th	Schemes of assistance by entrepreneurial support agencies at State level organization		
	6 <sup>th</sup>	Schemes of assistance by entrepreneurial support agencies at District level organization		
3rd	$7^{ m th}$	NSIC, NRDC, DC		

	8 <sup>th</sup>	MSME, SIDBI
	9 <sup>th</sup>	Commercial Banks, SFC's TCO
4 <sup>th</sup>	10 <sup>tn</sup>	KVIB, DIC
	11 <sup>tm</sup>	Technology Business Incubators (TBI) Science and Technology
		Entrepreneur Parks
	12 <sup>tin</sup>	Market Survey and Opportunity Identification: Scanning of the business environment
5 <sup>th</sup>	13 <sup>th</sup>	Salient features of National and State industrial policies and resultant business opportunities
	14 <sup>tm</sup>	Supply in potential areas of growth,
	15 <sup>th</sup>	Types and conduct of market survey & Assessment of demand
6 <sup>th</sup>	16 <sup>tm</sup>	Identifying business opportunity, Considerations in product selection
	17 <sup>th</sup>	1 <sup>st</sup> sessional test (Tentative)
	18 <sup>tm</sup>	Assessment
7 <sup>th</sup>	19 <sup>tin</sup>	Project report Preparation
	20 <sup>th</sup>	Preliminary project report

	21 <sup>st</sup>	Detailed project report including technical, economic
8 <sup>th</sup>	22 <sup>nd</sup>	Detailed project report including market feasibility
	23rd	Common errors in project report preparations
	24 <sup>th</sup>	Exercises on preparation of project report
9th	25 <sup>th</sup>	Introduction to Management: Definitions and importance of management, Functions of management
	26 <sup>th</sup>	Importance and process of planning, organizing, staffing, directing and controlling, Principles of management (Henri Fayol, F.W. Taylor)
	27 <sup>tm</sup>	Concept and structure of an organization & Line organization, Line and staff organization & Functional Organisation
10 <sup>th</sup>	28 <sup>th</sup>	2 <sup>nd</sup> sessional test (Tentative)
	29 <sup>th</sup>	Assessment
	30 <sup>st</sup>	Leadership: Definition and Need, Qualities and functions of a leader, Manager Vs leader, Types of leadership
11 <sup>th</sup>	31 <sup>nd</sup>	Motivation: Definitions and characteristics, Factors affecting motivation
	32 <sup>rd</sup>	Theories of motivation (Maslow, Herzberg, Douglas, McGregor)
	33 <sup>th</sup>	Human Resource Management: Introduction and objective, Introduction to Man power planning, recruitment and selection
12 <sup>th</sup>	34 <sup>th</sup>	Introduction to performance appraisal methods
	35 <sup>th</sup>	Material and Store Management: Introduction functions, and objectives of ABC Analysis and EOQ
	36 <sup>th</sup>	Marketing and sales: Introduction, importance, and its functions, Physical distribution,

13 <sup>tn</sup>	37 <sup>tn</sup>	Financial Management: Introductions, importance and its functions
	38 <sup>th</sup>	Elementary knowledge of income tax, sales tax, excise duty, custom duty and VAT,
	39 <sup>tn</sup>	Customer Relation Management (CRM): Definition and need, Types of CRM
14 <sup>th</sup>	4()st	process control, Total employees Involvement
	41 <sup>na</sup>	Just in time (JIT)
	42rd	Intellectual Property Right (IPR): Introductions, definition and its importance, Infringement related to patents, copy right, trade mark
15 <sup>th</sup>	43 <sup>th</sup>	3 <sup>rd</sup> sessional test (Tentative)
	44 <sup>tn</sup>	Assessment
	45 <sup>th</sup>	Revision