

Govt. Polytechnic Loharu Electronics and Communication Engineering

Lesson plan

	NAME OF FACULTY	:	MRS. ANSHU BHALLA
	DISCIPLINE	:	Electronics and Communication Engg.
	SEMESTER	:	5th
	SUBJECT	:	WIRELESS MOBILE COMMUNICATION
	LESSON PLAN DURATION:		15 weeks (30 JULY -23 NOV 2026)
	WORK LOAD (LECTURE/ PRACTICAL): LECTURES - 02 , PRACTICALS – 04		

Week	Theory		Practical	
	Lecture day	Topic	Practical Period	Topic
1	1	Wireless Communication Basics	1	1.Study the features, specification and working of cellular mobile
	2	Advantages of wireless communication	2	
			3	
			4	
2	1	Electromagnetic waves. Frequency Spectrum used.	1	1.Study the features, specification and working of cellular mobile
	2	Cellular network systems,	2	
			3	
			4	
3	1	Introduction to Propagation considerations-Range &Fading	1	2.Signal strength measurement
	2	Introduction to 2G	2	
			3	
			4	
4	1	Cell area, Cell Site Structure	1	Revision/Viva
	2	Capacity of cell, Frequency reuse	2	
			3	
			4	
5	1	Co-channel & Adjacent channel interference	1	3.Demonstration of Base Trans Receiver(BTS) with nearby cellular tower.

	2	Power control for reducing interference	2	
			3	
			4	
6	1	Fundamental of Cell splitting & sectoring	1	3. Demonstration of Base Trans Receiver(BTS) with nearby cellular tower.
	2	REVISION/TEST	2	
			3	
			4	
7	1	Multiple access introduction, FDMA	1	4.Observing call processing of GSM trainer kit.
	2	TDMA	2	
			3	
			4	
8	1	CDMA,WCDMA	1	6.GSM mobile troubleshooting
	2	OFDMA	2	
			3	
			4	
9	1	Revision /TEST	1	GSM mobile troubleshooting
	2	Introduction of GSM &its Architecture	2	
			3	
			4	
10	1	Introduction of GSM &its Architecture	1	REVISION/VIVA
	2	Introduction of GPRS	2	
			3	
			4	
11	1	Introduction of EDGE	1	5.Visit Mobile Switching Centre REVISION/VIVA
	2	Bluetooth, Wi-Fi	2	
			3	
			4	
12	1	REVISION/TEST	1	AT commands of GSM
	2	Introduction to Architecture and Features of UMTS	2	
			3	
			4	
13	1	Features of LTE (Long Term Evolution)	1	8.study of LTE Mobile communication
	2	Architecture of LTE (Long Term Evolution)	2	
			3	
			4	
14	1	Introduction to 5G,Concept of New radio technology	1	9.. study&demonstration of AT Commands of LTE
	2	Comparison of 4G and 5G	2	

			3	
			4	
15	1	Revision	1	Revision
	2	Revision	2	
			3	
			4	

SESSIONAL TEST CONDUCTED AS PER HSBTE TIME TABLE/SYLLABUS