

Week No	Lecture No	THEORY	PRACTICAL
1 week	1st lecture	Introduction about the subject	Introduction about the subject practicals
	2nd lecture	UNIT1: Basics of wireless communication	
	3rd lecture	advantages of wireless communication	
	4th lecture	Electromagnetic waves	
2 week	1st lecture	frequency spectrum used	study the features,specifications and working of cellular mobile
	2nd lecture	Paging system and Cordless Telephone system	
	3rd lecture	Cellular telephone system	
	4th lecture	Comparision of paging,cordless and cellular telephone system	
3 week	1st lecture	Propagation considerations-Range,atmospheric effect,Fading	study the features,specifications and working of cellular mobile
	2nd lecture	Doppler effect,Multipath effect	
	3rd lecture	UNIT2: Introduction to 1G & 2G	
	4th lecture	CLASS TEST(UNIT NO 1)	
4 week	1st lecture	Define cell and its types,shape,cellular concept,cell site structure,cell area,capacity of cell	signal strength measurement at variouspoints from transmitting antenna
	2nd lecture	frequency reuse concept,cochannel interference	
	3rd lecture	adjacent channel interference	
	4th lecture	Power control for reducing interference	
5 week	1st lecture	fundamentals of cellular network planning	signal strength measurement at variouspoints from transmitting antenna
	2nd lecture	CLASS TEST(UNIT NO 2)	
	3rd lecture	Revision of unit 1 & 2	
	4th lecture	1st Sessional	
6 week	1st lecture	UNIT3: Introduction to multiple access tehniques	visit to MSC
	2nd lecture	Frequency Division Multiple Access	
	3rd lecture	Time Division Multiple Access	
	4th lecture	Code Division Multiple Access	
7 week	1st lecture	difference between TDMA FDD and TDMA TDD	demonstration of BTS with nearby cellular tower
	2nd lecture	WCDMA	
	3rd lecture	Comparision of FDMA/TDMA/CDMA	
	4th lecture	CLASS TEST(UNIT NO 3)	
8 week	1st lecture	UNIT4 : Introduction to GSM	demonstration of BTS with nearby cellular tower
	2nd lecture	GSM architecture	
	3rd lecture	GSM architecture	
	4th lecture	GSM services	
9 week	1st lecture	Introduction to CDMA and its architecture	Revision and viva
	2nd lecture	Comparisionof GSM and CDMA	
	3rd lecture	Introduction to GPRS System,Bluetooth	
	4th lecture	Introducton to GPS System,EDGE,wi-fi	
10 week	1st lecture	CLASS TEST(UNIT NO 4)	Revision and viva
	2nd lecture	Revision of unit 3 & 4	
	3rd lecture	Revision of unit 3 & 4	
	4th lecture	2nd Sessional	
11 week	1st lecture	UNIT5: Introduction to UMTS	call processing of GSM Trainer kit
	2nd lecture	UMTS architecture and features	
	3rd lecture	UMTS architecture and features	
	4th lecture	HSPA(High speed Packet Access)	
12 week	1st lecture	Introduction to LTE(Long Term Evolution)	call processing of GSM Trainer kit
	2nd lecture	Architecture and features of LTE	
	3rd lecture	UNIT6: Assembling and dissembling of GSM phone	
	4th lecture	CLASS TEST(UNIT NO 5)	
13 week	1st lecture	Assembling and dissembling of GSM phone	Repair of a GSM mobile phone
	2nd lecture	Study parts of mobile phone	
	3rd lecture	Assembling and dissembling of GSM phone	
	4th lecture	Testing of various parts of mobile	
14 week	1st lecture	CLASS TEST(UNIT NO 6)	Repair of a GSM mobile phone
	2nd lecture	Study parts of mobile phone	
	3rd lecture	Testing of various parts of mobile	
	4th lecture	3rd SESSIONAL	
15 week	1st lecture	REVISION	Revision and viva
	2nd lecture	REVISION	
	3rd lecture	REVISION	
	4th lecture	REVISION	
16 week	1st lecture	CLASS TEST(UNIT NO 1 & 2)	Revision and viva
	2nd lecture	CLASS TEST(UNIT NO 3 & 4)	
	3rd lecture	CLASS TEST(UNIT NO 5 & 6)	
	4th lecture	REVISION	

*Extra classes taken in arrangement periods and practical labs.

Lesson Plan(6.3.23 -23.6.2023)

Program : Electronics and Communication Engg.

Subject:Wireless and Mobile Communications

Work Load(Lecture/Practical)per week : 04hrs(lecture),03hrs per group(practical)

Name of Faculty : Ms. Sumitra Sangwan
Semester - 6th

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