

01/12/18

classmate

Date

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Name of the faculty: SUSHIL SHARMA (Theory + Practical)

Discipline: Electronics And Communication Engg

Semester: 6th

Subject: Wireless and Mobile Communication (121063)

Lesson Plan Duration: 15 Weeks (from Jan 2018 to April 2018)

Work Load per week: Lectures = 4 Pds, Practical = 3 Pds

Week	Lecture Day	Theory Topic	Practical Topic
1 st	1	Introduction of Subject	Features and Specifications of cellular mobile
	2	Wireless Communication	
	3	Advantages of wireless communication	
	4	Electromagnetic waves	
2 nd	5	Frequency spectrum	Working of Cellular mobile
	6	Block diagram of Paging System	
	7	Paging system working	
	8	Block diagram of Cordless telephone system	
3 rd	9	operation of cordless telephone system	Signal strength measurement from a transmitting antenna
	10	Block diagram of Cellular telephone system	
	11	Working of cellular telephone system	
	12	comparison of three systems	
4 th	13	Cellular telephone system	Visit to MSC
	14	First Generation	
	15	Second Generation	
	16	Third Generation	
5 th	17	Fourth Generation	Repeat above experiments for absent students
	18	comparison of these generations	
	19	Assignment No 1	
	20	1 st Sessional Test	
6 th	21	Cellular Concept	Visit to nearby cellular tower BTS
	22	Cell area	
	23	Capacity of Cell	
	24	Frequency Response	

Week	Theory		Practical Topic
	Lecture day	Topic	
7 th	25	Cochannel Interference	Call processing in GSM system
	26	Adjacent channel interference	
	27	Power control for reducing interference	
	28	Cell Splitting	
8 th	29	Cell Sectoring	observe call processing in GSM in computer
	30	Repeater for range ^{ext.} -extension	
	31	Introduction to multiple Access	
	32	FDMA	
9 th	33	TDMA	Call processing in CDMA system
	34	CDMA	
	35	SSMA	
	36	FHSS	
10 th	37	comparison of FDMA, TDMA, CDMA	Observe call processing in CDMA in computer
	38	Advantages of multiple access	
	39	Assignment No 2	
	40	2 nd Sessional test	
11 th	41	Mobile communication systems	Pairing of two devices using Bluetooth
	42	Introduction to GSM	
	43	Architecture of GSM	
	44	Important features of GSM	
12 th	45	Introduction of CDMA system	Data transfer using Wi-Fi
	46	Architecture of CDMA	
	47	Important features of CDMA	
	48	comparison between CDMA and GSM	
13 th	49	GPRS system	Repeat above experiments for absent students.
	50	GPS system	
	51	Introduction to Bluetooth	
	52	Introduction to Wi-Fi	

Week	Theory		Practical
	Lecture day	Topic	Topic
14 th	S3	Digital and Data Communication	Visit to nearby cellular telephone exchange
	S4	Block diagram of digital System	
	S5	Block diagram of Data communication	
	S6	Comparison with analog system	
15 th	S7	Revision	Revision
	S8	Revision	
	S9	Assignment No 3	
	60	3 rd Sessional test	