

Department of Telecommunication

SEMESTER : VIII	NAME OF THE FACULTY : SHARMILA.K.P
BRANCH : TCE	DATE OF COMMENCEMENT : 15.2.2017
SUBJECT : GSM	DATE OF CLOSING : 21.5.2016
SUBJECT CODE : 10TE82	CLASS STRENGTH : 91
NO OF HRS/WK : 06	TOTAL HRS : 52

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	16.2.17	UNIT - 1 GSM ARCHITECTURE AND INTERFACES Introduction	Board, chalk, duster		
2	2/1	16.2.17	GSM frequency bands, GSM PLMN, Objectives of a GSM PLMN	„		
3	3/1	17.2.17	GSM PLMN Services, GSM Subsystems, GSM Subsystems entities	„		
4	4/1	17.2.17	GSM interfaces, The radio interface (MS to BSC), A bits interface (BTS to BSC), A interface (BSC to MSC)	„		
5	5/1	18.2.17	Interfaces between other GSM entities, Mapping of GSM layers onto OSI layers.	„		

6	6/1	18.2.17	Test-GSM subsystems, Mapping of GSM layers onto OSI layers.	„		
7	1/2	23.2.17	UNIT - 2 RADIO LINK FEATURES IN GSM SYSTEMS: Introduction,	„	Assignment- I	
8	2/2	23.2.17	Radio link measurements,	Board, chalk, duster		
9	3/2	2.3.17	Radio link features of GSM- Dynamic power control,	„		
10	4/2	2.3.17	Discontinuous transmission (DTX)	„		
11	5/2	9.3.17	SFH	„		
12	6/2	9.3.17	Future techniques to reduce interface in GSM	„		
13	7/2	10.3.17	Channel borrowing, Smart antenna	„	Assignment -II	
14	1/3	10.3.17	UNIT - 3 GSM LOGICAL CHANNELS AND FRAME STRUCTURE: Introduction	„		
15	2/3	11.3.17	GSM logical channels, Allowed logical channel combinations			
16	3/3	11.3.17	TCH multi frame for TCH/H, CCH multi frame			
17	4/3	16.3.17	GSM frame structure			
18	5/3	16.3.17	GSM bursts, Normal burst, Synchronization burst	„		
19	6/3	17.3.17	Frequency correction channel burst, Access burst, Data encryption in GSM	„	Assignment –III	
20	7/3	17.3.17	Mobility management, Location registration, Mobile identification.	„		

21	1/4	18.3.17	UNIT - 4 SPEECH CODING IN GSM: Introduction	„		
22	2/4	18.3.17	Speech coding methods, Speech code attributes	„		
23	3/4	23.3.17	ITU-T standards, Bit rate, Waveform coding			
24	4/4	23.3.17	Time domain waveform coding, Frequency domain waveform coding	Board, chalk, duster		
25	5/4	24.3.17	GSM Vocoders, Full-rate vocoder, Half-rate vocoder	„		
26	6/4	24.3.17	MESSAGES, SERVICES, AND CALL FLOWS IN	„		
27	7/4	31.3.17	GSM: Introduction, GSM PLMN services.			
28	1/5	31.3.17	UNIT - 5 GSM messages	„	Assignm nt –IV	
29	2/5	1.4.17	MS-BS interface, BS to MSC messages o n the A interface, MSC to VLR and HLR	„		
30	3/5	1.4.17	GSM call setup by an MS, Mobile-Terminated call, Call release, Handover	„		
31	4/5	6.4.17	Data services, Data interworking	„		
32	5/5	6.4.17	SM data services, Interconnection for switched data, Group 3 fax	„		
33	6/5	7.4.17	Packet data on the signaling channel, User-to-user signaling, SMS, GSM GPRS.	„		
34	1/6	7.4.17	UNIT - 6 PRIVACY AND SECURITY IN GSM: Introduction	Board, chalk, duster	Assignm ent -V	
35	2/6	8.4.17	Wireless security requirements, Privacy of communications	„		

36	3/6	8.4.17	Authentication requirements, System lifetime requirements	„		
37	4/6	13.4.17	Physical requirements, SIM cards	„		
38	5/6	13.4.17	Security algorithms for GSM	„		
39	6/6	20.4.17	Token-based authentication	„		
40	7/6	20.4.17	Token-based registration, Token-based challenge.	„		
41	1/7	21.4.17	UNIT - 7 PLANNING AND DESIGN OF A GSM WIRELESS NETWORK: Introduction, Tele traffic models, Call model, Topology model,	„		
42	2/7	21.4.17	Mobility in cellular / PCS networks, Application of a fluid flow model	„		
43	3/7	22.4.17	Planning of a wireless network	„		
44	4/7	22.4.17	Radio design for a cellular / PCS network, Radio link design, Coverage planning	„		
45	5/7	27.4.17	Design of a wireless system, Service requirements, Constraints for hardware implementation, Propagation path loss, System requirements	„		
46	6/7	27.4.17	Spectral efficiency of a wireless system, Receiver sensitivity and link budget	„		
47	7/7	28.4.17	Selection of modulation scheme, Design of TDMA frame, Relationship between delay spread and symbol rate, Design example for a GSM system.			
48	1/8	28.4.17	UNIT - 8 MANAGEMENT OF GSM NETWORKS: Introduction, Traditional	„		

			approaches to NM			
49	2/8	4.5.17	TMN, TMN layers, TMN nodes, TMN interface, TMN management services	„		
50	3/8	4.5.17	Management requirements for wireless networks, Management of radio resources, Personal mobility management, Terminal mobility, Service mobility management	„		
51	4/8	5.5.17	Platform-centered management, SNMP, OSI systems management	Board, chalk, duster		
52	5/8	5.5.17	NM interface and functionality, NMS functionality, OMC functionality	„		
53	6/8	11.5.17	Management of GSM network, TMN applications	„		
54	7/8	11.5.17	GSM information model, GSM containment tree, Future work items.	„		
55		12.5.17	Revision of Unit -1	„		
56		12.5.17	Revision of Unit – 2	„		
57		13.5.17	Revision of Unit –3	„		
58		13.5.17	Revision of Unit –4	„		
59		18.5.17	Revision of Unit –5	„		
60		19.5.17	Revision of Unit –6	„		
61		19.5.17	Revision of Unit –7	„		
62		20.5.17	Revision of Unit -8	„		

Signature of faculty

Signature of HOD

Signature of Principal

Department of Telecommunication

SEMESTER : VIII
BRANCH : TCE
SUBJECT : OCN
SUBJECT CODE : 10TE81
NO OF HRS/WK : 63

NAME OF THE FACULTY : S. Routray
DATE OF COMMENCEMENT : 16.02.2017
DATE OF CLOSING : 10.06.2017
CLASS STRENGTH : 46 (A) / 40 (B)
TOTAL HRS : 63

S. No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1/2	Unit I/2	16.2.17	INTRODUCTION TO OPTICAL NETWORKS:	Black Board, chalk & duster		
2/3	I/3	17.2.17	Telecommunication networks,	„		
4/5	I/5	18.2.17	First generation optical networks,	„		
6/7	I/7	23.2.17	Multiplexing techniques, Second-generation optical networks,	„		
8/9	I/9	02.3.17	System and network evolution. Non-linear effects SPM	„		
10/11	I/10	09.2.17	CPM, Four wave mixing, Solitons	„		
12/13	II/3	10.03.17	COMPONENTS	„	Asg – I	
14/15	II/5	11.03.17	Working of Couplers, 3 and 4 port couplers	„		
16/17	II/7	16.03.17	Isolators and Circulators	„		
18/19	II/9	17.03.17	Working of wave length Multiplexes	„		
20/21	II/11	18.03.17	Filters and Optical amplifiers	„		
22/23	III/2	18.03.17	Introduction to optical systems	„		
24/25	III/4	23.03.17	Transmitters	„	Asg – II	
26/27	III/6	24.03.17	Working principle of detector	„		
28/29	III/8	31.03.17	Switches and Wavelength converters	„		
30/31	IV/2	01.04.17	TRANSMISSION SYSTEM ENGINEERING			
32/33	IV/4	06.04.17	System model and Power penalty			
34/35	IV/6	07.04.17	Transmitter, and Receiver	„		
36/37	IV/8	08.04.17	Crosstalk	„	Asg – III	
38/39	V/2	13.04.17	Dispersion, Overall design Consideration	„		
40/41	V/4	20.04.17	First generation networks SONET/SDH	„		
42/43	V/6	21.04.17	Computer interconnects, MANs	„		
44/45	V/8	22.03.17	Layered architecture for SONET	„		
46	V/10	27.04.17	Second generation networks	„		
47	VI/2	28.04.17	WAVELENGTH ROUTING NETWORKS	„		
48	VI/4	04.05.17	Optical layer	„		
49	VI/6	05.05.17	Node design	BB, C&D	Asg – IV	

50	VI/8	11.05.17	Network design and operation	„		
51	VI/10	12.05.17	Routing and wavelength assignment	„		
52	VII/2	13.05.17	VIRTUAL TOPOLOGY DESIGN	„		
53	VII/4	18.05.17	Combines SONET/WDM network design	„		
54	VII/6	19.05.17	an ILP formulation, Regular virtual	„		
55	VII/8	20.05.17	Control and management, Network management configuration management	„	Asg – V	
56	VII/10	25.05.17	Performance management, fault management.	„		
57	VIII/2	26.05.17	ACCESS NETWORKS:	„		
58	VIII/4	27.05.17	Network architecture overview, present and future access networks	„		
59	VIII/6	01.06.17	HFC, FTTC	„		
60	VIII/8	02.06.17	Optical access networks, Deployment issues	„		
61	VIII/10	03.06.17	Photonic packet switching	„		
62	VIII/12	08.06.17	OTDM, Multiplexing and demultiplexing	„		
63	VIII/13	09.06.17	Synchronization	„	Asg – VI	
64			Revision of the relevant parts	„		
65			Revision of the relevant parts	BB, C & D		

Signature of faculty

Signature of HOD

Signature of Principal

Department of Electronics and Communication

SEMESTER : VIII
BRANCH : ECE
SUBJECT : MMC
SUBJECT CODE: 10EC841
NO OF HRS/WK: 5

NAME OF THE FACULTY : Mrs.Pappa.M/Mrs.Eisha/Mrs.Jyoti
DATE OF COMMENCEMENT : 16.02/2017
DATE OF CLOSING : 24.05.2017
CLASS STRENGTH :52/55
TOTAL HRS : 52

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assign ments/ Tests planned for the chapter	Topics covered As per plan
	UNIT-1	16/2	UNIT-1 INTRODUCTION, MULTIMEDIA INFORMATION REPRESENTATION, MULTIMEDIA NETWORK, Multimedia applications, media types	Board, chalk, duster		
	UNIT-1	17/2	media types, communication modes, network media types	”		
	UNIT-1	18/2	Communication modes, network types			
	UNIT-1	23/2	Multipoint conferencing, network QOS application			
	UNIT-2	2/3	Introduction, digital principles			
	UNIT-2	9/3	digital principles			
	UNIT-2	10/3	Text, images			
	UNIT-2	11/3	audio, video			
	UNIT-3	16/3	Introduction, Compression principles			
	UNIT-3	17/3	Text compression			

	UNIT-3	18/3	Image compression			
	UNIT-4	23/3	Introduction, audio compression,			
	UNIT-4	24/3	DPCM, ADPCM			
	UNIT-4	31/3	APC, LPC, video compression,			
	UNIT-4	1/4	Video compression principles			
	UNIT-4	6/4	H.261, H.263,			
	UNIT-4	7/4	MPEG, MPEG-1,			
	UNIT-4	8/4	MPEG-2,			
	UNIT-5	13/4	MPEG-3			
	UNIT-5	20/4	Introduction, LAN, Ethernet,			
	UNIT-5	21/4	Token Ring, Bridges, FDDI,			
	UNIT-6	22/4	High Speed LAN, LAN protocol			
	UNIT-6	27/4	Introduction, IP datagram, Fragmentation			
	UNIT-6	28/4	IP address, ARP			
	UNIT-6	4/5	RARP, QoS Support,			
	UNIT-6	5/5	IPV8			
	UNIT-7	11/5	Introduction, Cell format			
	UNIT-7	12/5	Switch, protocol architecture			
	UNIT-7	13/5	ATMLAN			
	UNIT-8	18/5	Introduction, TCP/IP,			
	UNIT-8	19/5	TCP, UDP			
	UNIT-8	20/5	, RTP, RCTP			

Signature of faculty

Signature of HOD

Signature of Principal

Session wise- Course Plan
Department of Telecommunication Engineering

SEMESTER	: 8	NAME OF THE FACULTY	: Mrs. Priya R.
BRANCH	: TCE	DATE OF COMMENCEMENT	: 13.02.2017
SUBJECT	: Network Security	DATE OF CLOSING	: 20.05.2017
SUBJECT CODE	: 10EC832	CLASS STRENGTH	: 93[A & B]
NO OF HRS/WK	: 5	TOTAL HRS	: 59

Class #	Chapter no (No of hrs planned for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	16/2/2017	Unit 1: Introduction, Services	Board, chalk, duster, projector		
2	2/1	16/2/2017	Mechanisms and attacks,	“		
3	3/1	17/2/2017	The OSI security architecture	“		
4	4/1	17/2/2017	A model for network security.	“		
5	1/2	18/2/2017	Unit 2: Symmetric Cipher Model	“		
6	2/2	23/2/2017	Substitution Techniques,	“		
7	3/2	23/2/2017		”		
8	4/2	2/03/2017	Transposition Techniques	“	Assignment-1	
9	5/2	2/03/2017		”		
10	6/2	9/03/2017	Simplified DES	“		
11	7/2	9/03/2017		”		
12	8/2	10/03/2017	Data encryption standard (DES)	“		
13	9/2	10/3/2017	The strength of DES	“		
14	10/2	11/3/2017	Differential and Linear Cryptanalysis	“		
15	11/2	16/3/2017	Block Cipher Design Principles and Modes of Operation,	“		
16	12/2	16/3/2017		”		
17	13/2	17/3/2017		“		

18	14/2	17/3/2017	Evaluation Criteria for Advanced Encryption Standard, The AES Cipher	“		
19	1/3	18/3/2017	Unit 6: Intruders,	“		
20	2/3	23/03/2017		“		
21	3/3	23/3/2017	Intrusion Detection,	“		
22	4/3	24/3/2017		“		
23	5/3	24/03/2017	Password Management	“	IAT-1	
24	6/3	31/3/2017		“		
25	1/4	31/3/2017	Unit 3: Principles of Public-Key Cryptosystems	“		
26	2/4	01/4/2017	The RSA algorithm	“		
27	3/4	01/04/2017		“		
28	4/4	06/04/2017	Key Management,	“		
29	5/4	06/04/2017	Diffie - Hellman Key Exchange,	“		
30	6/4	07/04/2017		“		
31	7/4	07/04/2017	Elliptic Curve Arithmetic,	“		
32	8/4	08/04/2017		“		
33	9/4	13/04/2017	Authentication functions	“		
34	10/4	13/04/2017	Hash Functions.	“		
35	1/5	20/04/2017	Unit 7: Viruses and Related Threats	“	Assignment-2	
36	2/5	20/04/2017		“		
37	3/5	21/04/2017		“		
38	4/5	21/01/2017		“		
39	5/5	22/04/2017		“		
40	6/5	27/04/2017	Virus Countermeasures	“		
41	7/5	27/04/2017		“		
42	1/6	28/04/2017	Unit 4: Digital signatures,	“		
43	2/6	28/04/2017		“		
44	3/6	04/05/2017	Authentication Protocols,	“		
45	4/6	04/05/2017		“		
46	5/6	05/05/2017		“	IAT-2	
47	6/6	05/05/2017	Digital Signature Standard	“		
48	7/6	11/05/2017		“		
49	1/7	11/05/2017	UNIT 5: Web Security	“	Assignment-3	
50	2/7	12/05/2017	Consideration	“		
51	3/7	12/05/2017	Security socket layer (SSL) and Transport layer security	“		
52	4/7	13/05/2017		“		
53	5/7	18/05/2017	Secure Electronic Transaction	“		
54	1/8	18/05/2017	Unit 8: Firewalls Design Principles,	“		
55	2/8	19/05/2017		“		
56	3/8	19/05/2017		“		
57	4/8	20/05/2017	Trusted Systems.	“		
58	5/8	20/05/2017		“	IAT-3	

Signature of faculty

Signature of HOD

Signature of Principal

