

Course Number and Name												
BET603- Telecommunication Switching Systems												
Credits and Contact Hours												
3 and 45												
Course Coordinator's Name												
Ms S.Beulah Hemalatha												
Text Books and References												
TEXTBOOK: 1. J.E FLOOD, "telecommunication switching, traffic and networks" Pearson education.												
REFERENCE BOOKS: 1. T.V.SWAMINATHAN, telecommunication switching system & networks, PHI. 2. http://www.newagepublishers.com/samplechapter/000969.pdf												
Course Description												
<ul style="list-style-type: none"> To learn about the concepts of switching system and networks in detail. 												
Prerequisites						Co-requisites						
Computer Communication and Networks						NIL						
required, elective, or selected elective (as per Table 5-1)												
Selected elective												
Course Outcomes (COs)												
CO1: To learn about the various switching systems												
CO2: To learn in detail about time division switching.												
CO3: To know about traffic management.												
CO4: To understand about various signaling in tele communication systems												
CO5: To analyze various telecommunication networks												
CO6: To estimate the performance of telecommunication networks.												
Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	
CO1	M	M	M				M					
CO2	H	H	L	L								
CO3	M	M	H	M	M					M		
CO4	M		L						M		M	
CO5	H	M					M		M			
CO6	M		M		M	M		H	M	M		

List of Topics Covered

UNIT -I SWITCHING SYSTEMS

9

Introduction-Message switching-Circuit switching-Manual switching-Functions of switching system- Strowger step by step system-Register translator-Senders-Distribution frames-Cross bar systems-General trunking-Electronic switching-Reed electronic systems-Digital switching systems.

UNIT- II TIME DIVISION SWITCHING

9

Introduction-Space and time switching-Time division switching networks-grades of services-Time division switching networks-non blocking networks-synchronization.

UNIT -III TELECOMMUNICATION TRAFFIC

9

Introduction-Unit of traffic-Congestion-Traffic measurement-A mathematical model-Local call systems-Queuing systems.

UNIT -IV TELECOMMUNICATION SIGNALLING

9

Introduction-Customer line signaling- Audio frequency junction and trunk circuits-FDM carrier systems-PCM signaling- Inter register signaling- Common channel signaling principles-CCITT signaling, CCITT signaling, Digital customer line signaling.

UNIT-V TELECOMMUNICATION NETWORKS

9

Introduction-Analog networks-Integrated digital networks-Integrated service digital networks-Cellular radio networks-Intelligent networks-Private networks-numbering-charging-Routing-Network management.