Seat No.:	Enrolment No.
Deat 110	Linonicht 110.

## GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER-I(New course) • EXAMINATION – WINTER- 2015

Sul	Subject Code: 2710505 Date: 01/01/2		16
Sul	bject	Name: Telecom Switching System, Networks and Network Managemer	nt
Tir	ne:	2:30 pm to 5:00 pm Total	
Ma	arks:	70	
Inst	truction		
	1. 2. 3.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a)	What do you mean by Stored Program Control? Draw and explain the organization of a Centralized SPC.	07
	<b>(b)</b>	Explain time slot interchange switch.	<b>07</b>
Q.2	(a) (b)	Compare manual and automatic switching systems.  Explain time division time switching and its modes of operation in brief.  OR	07 07
	<b>(b)</b>	In what way is stored program control superior to hard-wired control?	07
Q.3	(a) (b)	Write a short note on Avalanche Photodiode.  A subscriber makes three phone calls of three minutes, four minutes and two minutes duration in a one hour period. Calculate the subscriber traffic in Erlangs, CCS and CM.	07 07
		OR	
Q.3	(a)	Explain different types of optical sources used for fiber optic communication. Explain any one in detail.	07
	(b)	<ul> <li>Attempt The Following.</li> <li>a. Differentiate between Folded and Non-Folded network. In a 50-line folded network, how many switching elements are required for non-blocking operation?</li> <li>b. Classify switching system.</li> </ul>	07
Q.4	(a) (b)	Explain SNMP System Architecture in detail with necessary diagram.  Explain Integrated Digital Service Network (ISDN) in brief and list its services.  OR	07 07
Q.4	(a) (b)	Draw and explain SNPMv2 system architecture. Explain ISDN Functional Groupings and Reference points with necessary diagram.	07 07
Q.5	(a) (b)	Explain how Remote Monitoring works.  Explain in brief: Network Traffic Management Tools  OR	07 07
Q.5	(a) (b)	Explain RMON1 groups and functions. Explain in brief: Satellite based data networks.	07 07

\*\*\*\*\*