

GUJARAT TECHNOLOGICAL UNIVERSITY**ME SEMESTER – I EXAMINATION – SUMMER 2017****Subject Code:2710505****Date:09/05/2017****Subject Name: Telecom Switching System, Networks and Network Management****Time:02:30 p.m. to 05:00 p.m.****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Compare centralized data network and distributed data network and explain centralized stored program control in detail. **07**
- (b) Compare manual and automatic switching systems. **07**
- Q.2** (a) Explain time division time switching and its modes of operation in brief. **07**
- (b) What are the broad categories of the Enhanced Services? Discuss three-party conferencing connection. **07**
- OR**
- (b) In what way is stored program control superior to hard-wired control? **07**
- Q.3** (a) Explain parallel-in/serial-out configuration of time multiplexed time division time switch. **07**
- (b) Write a short note on LASER diode. **07**
- OR**
- Q.3** (a) Explain types of optical fibers and fiber optic transmission system. **07**
- (b) Write a short note on Cellular Mobile Telephony System. **07**
- Q.4** (a) Explain SNMP architecture with necessary diagram and list the messages used for Network Management. **07**
- (b) Draw and explain in brief the ISDN protocol architecture. **07**
- OR**
- Q.4** (a) Discuss SNMPV2 network management architecture. List the changes introduced in the architecture of SNMPV2 with respect to SNMPV1. **07**
- (b) Explain ISDN User Network Interface BRI and PRI in brief. **07**
- Q.5** (a) Draw and explain Network Configuration with RMONs. **07**
- (b) Explain architecture of SS7 in detail. **07**
- OR**
- Q.5** (a) Explain RMON1 groups and functions with the help of necessary diagram. **07**
- (b) Explain Network Traffic Monitoring tools in brief. **07**
