| Seat No.: | Enrolment No. |
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Subject Code: 2710505

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER I (NEW) – • EXAMINATION – SUMMER 2016

Subject Name: Telecom Switching System, Networks and Network Management

Date:17/05/2016

| Time: 02:30 pm to 05:00 pm | | 2:30 pm to 05:00 pm Total Marks: | Total Marks: 70 | |
|----------------------------|--|---|-----------------|--|
| Inst | nstructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 1. (a) Compare centralized data network and distributed data network and explain centralized stored program control in detail. (b) Compare manual and automatic switching systems. 2. (a) What are the broad categories of the Enhanced Services? Discuss three-party conferencing connection. (b) Explain two stage blocking network and derive the equation of blocking probability. OR (b) Define: [1] Busy Hour [2] Peak Busy Hour [3] Erlang [4] Centum Call Second [5] Grade of Service [6] Folded Network [7] Blocking Network 3. (a) Explain parallel-in/serial-out configuration of time multiplexed time division time switch. (b) Write a short note on LASER diode. OR 3. (a) Explain types of optical fibers and fiber optic transmission system. OR 4. (a) Explain SNMP architecture with necessary diagram and list the messages used for Network Management. (b) Draw and explain in brief the ISDN protocol architecture. OR | | | |
| | | | | |
| | 3. | Figures to the right indicate full marks. | | |
| Q.1 | (a) | <u> </u> | 07 | |
| | (b) | Compare manual and automatic switching systems. | 07 | |
| Q.2 | (a) | | 07 | |
| | (b) | probability. | 07 | |
| | | - | | |
| | (b) | • • | 07 | |
| Q.3 | (a) | | 07 | |
| | (b) | Write a short note on LASER diode. | 07 | |
| | | | | |
| Q.3 | | | | |
| Q.4 | (a) | · · | 07 | |
| | (b) | | 07 | |
| 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) (b) | Draw and explain Network Configuration with RMONs. Explain architecture of SS7 in detail. | 07 07 | |
| | | OR | | |
| Q.5 | (a) (b) | Explain RMON1 groups and functions with the help of necessary diagram. Explain Network Traffic Monitoring tools in brief. | 07 07 | |
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