

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEMESTER– V(OLD) • EXAMINATION – WINTER- 2017

Subject Code: 150702

Date: 16/11/ 2017

Subject Name: Computer Network

Time: 10:30 AM TO 01:00 PM

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) Classify various transmission media by their characteristics. 07
(b) Explain the terms : LAN, CAN, MAN, WAN 07
- Q.2** (a) Explain all steps of link state routing with example. 07
(b) Explain Sliding window protocol using GO back to N. 07
OR
(b) Explain STOP and Wait Protocol. 07
- Q.3** (a) Enlist various collision free protocols. Explain any one in detail with example. 07
(b) Explain Virtual circuit and cells with respect to ATM 07
OR
- Q.3** (a) What is difference between error detection and correction? Give method names for both. 07
Explain error detection technique with example.
(b) What is topology? Give different type of topology and its use 07
- Q.4** (a) Discuss and list the congestion prevention policies at data link, network and transport layers that can affect the congestion. 07
(b) Write a short note on DNS 07
OR
- Q.4** (a) Explain Load shedding and Jitter control strategies to handle the congestion. 07
(b) Write a short note on WWW and Email. 07
- Q.5** (a) Apply binary, Manchester and differential Manchester encoding on following bit pattern 10110111. 07
(b) Give differences between connection oriented and connectionless services 07
OR
- Q.5** (a) What is cyclic redundancy check? Show the calculation polynomial code checksum for a frame 1101011011 using the generator x^4+x+1 07
(b) Explain IPv4 header in detail. 07
