

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER– IV EXAMINATION – WINTER - 2017

Subject Code:640001

Date: 28-12-2017

Subject Name: Fundamental of Networking

Time:02:30 pm to 05:00 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) Define the following. 07**
1. Piggybacking 2. Baud Rate 3. Bandwidth 4. Wireless
Communication 5. Cryptography 6. Handoff 7. DNS
- (b) 1. Write short note on 802.16 Protocol Stack 04**
2. What is CSMA/CD? 03
- Q.2 (a) Explain the terms: Hub, Switch, Repeaters, Router & Gateways. 07**
(b) Explain Go back n protocol with its merit and demerits. 07
- OR**
- (b) Write a note on Error Correction and Error Detection with examples. 07**
- Q.3 (a) Explain Selective Repeat Protocol with its advantage and disadvantages. 07**
(b) Write a note on Binary Exponential Back-off Algorithm. 07
- OR**
- Q.3 (a) State the difference between Selective Repeat and Go back n protocol. 07**
(b) Explain access point primitives. Explain types of frame in network. 07
- Q.4 (a) Discuss Wireless Broadband with its sub layers. 07**
(b) 1. Define: Congestion Control. 03
2. Compare connection oriented and connectionless services. 04
- OR**
- Q.4 (a) 1. Write a note on Cable Modem. 04**
2. Explain working of Active Repeaters and Passive Interfaces. 03
(b) Discuss OSI Reference Model in detail. 07
- Q.5 (a) 1. Explain working application of S-BOX. 04**
2. What is Milk and Wine policy in load shedding during congestion control? 03
(b) Discuss Digital Signature using Public Key Cryptography. 07
- OR**
- Q.5 (a) Discuss SMTP with its advantage and disadvantages. 07**
(b) List and explain Cipher modes in detail. 07
