FirstRanker.com
Firstranker's choice

Printed Pages : 1 Roll No. EEC809

www.FirstRanker.com www.FirstRanker.com

# B.TECH.

## THEORY EXAMINATION (SEM–VIII) 2016-17

## DATA COMMUNICATION NETWORK

*Time : 3 Hours* *Max. Marks : 100*

***Note :*** *Be precise in your answer. In case of numerical problem assume data wherever not provided.*

### SECTION – A

**1. Attempt the following:** **10 x 2 = 20**

**a)** Which are the three generation of Ethernet?

**b)** What are the desired properties of routing algorithm?

**c)** What are the various causes of Congestion?

**d)** What are the types and applications of Cryptography?

**e)** Define Socket? What is its type?

**f)** Draw and explain simple communication model?

**g)** What is the relation between bandwidth and bit rate?

**h)** What are the advantages of optical fiber over co-axial cable?

**i)** List the types of IP address?

**j)** Define Flow control?.

### SECTION – B

**2. Attempt any five parts of the following question:** **5 x 10 = 50**

**a)** Explain Go Back n protocol .What are its limitations?

**b)** Draw and explain the Frame structure of HDLC?

**c)** Explain the transmission policy of TCP?

**d)** Explain in detail IEEE 802.4 with the help of Suitable example?

**e)** Explain Distant Vector routing algorithm? What are counts to infinite problem?

**f)** Explain the following?

(i) Leaky bucket algorithm (ii) User Datagram Protocol (UDP)

**g)** Explain the header format of TCP? How connection is established in TCP?

**h)** Compare the salient features of HTTP and FTP?

### SECTION – C

**Attempt any two questions of the following:** **2 x 15 = 30**

**3.** Explain Slotted ALOHA and Pure ALOHA with derivations of their efficiency?

**4.** Explain the frame format of IPv4? What are the advantages of IPv6 and IPv4?

**5.** (i) Describe ATM protocol layers and compare them to the OSI protocol hierarchy

(ii) Calculate CRC for the 10 bit sequence 1010011110. Where the generator polynomial is $x3 + x + 1$.

FirstRanker.com
Firstranker's choice
www.FirstRanker.com