

SOLVED MODEL QUESTION PAPER (End Sem)

Computer Networks

T.E. (AI&DS) Semester - V (As Per 2019 Pattern)

Time : $2\frac{1}{2}$ Hours]

[Maximum Marks : 70

N.B. :

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

- Q.1** a) What is IPv4 ? Draw and explain header format of IPv4. [8]
(Refer sections 3.3 and 3.3.5)
- b) Explain count-to-infinity problem. (Refer section 3.10.1) [5]
- c) What is RIP ? Compare RIP with OSPF (Refer sections 3.14.1 and 3.14.5) [5]

OR

- Q.2** a) Explain Link state routing with example. (Refer section 3.11) [8]
- b) What is routing? Explain static routing. (Refer section 3.9) [5]
- c) Write IPv6. (Refer section 3.4) [5]
- Q.3** a) What are three different types of sockets ? Explain various socket primitives used in connection oriented client server approach. (Refer section 4.2) [12]
- b) Explain 802.11 wireless frame format ? (Refer section 6.7) [5]

OR

- Q.4** a) What is the difference between persistent and non persistent HTTP ? Explain HTTP request and reply message format. (Refer section 5.3) [12]
- b) Explain CSMA/CD in detail ? (Refer section 6.3) [5]
- Q.5** a) Explain FTP in detail ? Explain any four FTP commands. (Refer section 5.8) [12]
- b) Give comparison of Pure and Slotted ALOHA. (Refer section 6.3) [6]

OR

- Q.6** a) What is DNS ? Explain its various resource records with one example. [12]
(Refer section 5.5)

- b) Explain HTTP request and reply message format. (Refer section 5.3) [6]
- Q.7** a) Why we need DHCP ? Explain in detail. (Refer section 5.10) [3]
- b) Explain working of IMAP. (Refer section 5.6) [6]
- c) Explain working of CSMA/CA with the help of flow diagram. (Refer section 6.4) [8]

OR

- Q.8** a) Draw and explain frame format of 802.16 standard. (Refer section 6.9) [3]
- b) Explain DNS message format ? (Refer section 5.5) [8]
- c) Represent 101011100 using Manchester and differential Manchester line coding technique. (Refer example 6.6.1) [6]

□□□