[5670]-202

B.E. (E & TC)

COMPUTER NETWORKS

(2012 Pattern)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1)   *Answer 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 indicate full marks.*

4)   *Assume suitable data if necessary.*

Q1) a)   Draw TCP/IP reference model and explain functions of transport layer.**[7]**

b)   Compare & contrast between random access protocol with channelizing protocol.   **[5]**

c)   With the neat diagram explain concept of Bus and Star Backbone Network.   **[8]**

OR

Q2) a)   Draw TCP/IP protocol suite & explain addresses present at each layer.**[7]**

b)   Explain Selective Repeat protocol in data link layer.   **[7]**

c)   Explain Basic Service Set and Extended Service Set.   **[6]**

Q3) a)   Write short note on DHCP.   **[6]**

b)   List the various protocols at network layer giving their significance.   **[5]**

c)   Give general format of ICMP and explain different types of error reporting messages used in ICMP.   **[7]**

OR

Q4) a)   Explain the concept of delivery and its different types used in network.**[8]**

b)   Give the classification of commonly used Unicast Routing protocols and explain Distance Vector Routing protocol with an appropriate example.

[10]

P.T.O.

Q5) a) Explain the TCP Connection management in Client/Server model. **[6]**

b) Draw the TCP frame format. Explain the use of flags. **[10]**

OR

Q6) a) Compare between TCP and UDP. Under what circumstances you will use them. **[8]**

b) List the typical QoS parameters in the Transport Layer and explain each one. **[8]**

OR

Q7) a) Explain the basic concept of cryptography and encryption model. **[6]**

b) Write short on DNS in Internet. **[6]**

c) What is the purpose of FTP? What are the three FTP transmission modes? Explain. **[4]**

OR

Q8) a) What are the main responsibilities of Application Layer? Explain in brief.**[4]**

b) Compare symmetric and asymmetric cipher. **[6]**

c) Explain the security aspects of intranet and internet. **[6]**

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