[4959]-1082

B.E. [E & TC]

Computer Networks

(2012 Course) (404182)

Time : 2½ Minutes   *[Max. Marks :70]*

Instructions to the candidates:

1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.*

2) *Neat diagrams must be drawn wherever necessary.*

3) *Figures to the right side indicate full marks.*

4) *Assume suitable data, if necessary.*

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

b) State & explain in brief the functions associated with Data Link Layers in OSI model. **[7]**

c) Explain the sliding window protocols in brief. **[6]**

OR

Q2) a) Draw the Blue tooth architecture and explain the functions of different layers in Bluetooth. **[7]**

b) With an appropriate example, explain character stuffing and bit stuffing in data link layer. **[7]**

c) Explain Basic service Set and Extended Service set in WLAN. **[6]**

Q3) a) Draw and explain the header format for IPv6. **[6]**

b) List the various protocols giving their significance at transport Layer.**[6]**

c) Give general format of ICMP and explain different types of error reporting messages used in ICMP. **[6]**

OR

P.T.O.

Q4) a) Draw and explain IPv6 frame format. **[6]**

b) Write short notes on. **[6]**

     i) ARP.

     ii) RARP.

c) Explain the concept of delivery and its different types used in network.**[6]**

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

b) What are the duties of Transport Layer? List the services provided by Transport Layer to upper layers. **[6]**

c) Write a short note on congestion control. **[4]**

<div align="center">OR</div>

Q6) a) Compare between TCP and UDP. Under what circumstances you will use them. **[6]**

b) List the typical QoS parameters in the Transport Layer and explain each one. **[6]**

c) Draw the UDP segment format. Explain its various fields and their use.**[4]**

Q7) a) What is the purpose of FTP? What are the three FTP transmission modes? Explain **[6]**

b) Write short notes on www & internet. **[6]**

c) With an appropriate example, explain the Public key algorithm. **[4]**

<div align="center">OR</div>

Q8) a) Explain the security aspects of intranet and internet. **[6]**

b) Write short note on Firewall. **[6]**

c) Explain the Transposition cipher with its advantages and disadvantages.**[4]**

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