| Total No | . of Qu | iestions | :8] |
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[Total No. of Pages :2

[4959]-1082 **B.E.** [E & TC] **Computer Networks**

(2012 Course) (404182) Time: 2½ Minutes [Max. Marks:70] Instructions to the candidates: Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8. 1) 2) Neat diagrams must be drawn wherever necessary. Figures to the right side indicate full marks. 3) Assume suitable data, if necessary. *Q1*) a) Draw TCP/IP reference model and explain functions of each layer. [7] State & explain in brief the functions associated with Data Link Layers in b) OSI model. [7] Explain the sliding window protocols in brief. [6] c) OR Draw the Blue tooth architecture and explain the functions of different **Q2)** a) layers in Bluetooth. [7] With an appropriate example, explain character stuffing and bit stuffing b) in data link layer. [7] Explain Basic service Set and Extended Service set in WLAN. c) [6] Draw and explain the header format for IPv6. [6] *Q3*) a) List the various protocols giving their significance at transport Layer. [6] b) Give general format of ICMP and explain different types of error reporting c) messages used in ICMP. [6]

| Q4) a) | Draw and explain IPv6 frame format. | | |
|---------------|---|----------------------|--|
| 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 Transport Layer to upper layers. | by [6] | |
| c) | Write a short note on congestion control. | [4] | |
| | OR | | |
| Q6) a) | Compare between TCP and UDP. Under what circumstances you use them. | will [6] | |
| b) | List the typical QoS parameters in the Transport Layer and explain e one. | ach [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 mod Explain | les? [6] | |
| b) | Write short notes on www & internet. | [6] | |
| c) | With an appropriate example, explain the Public key algorithm. | [4] | |
| | OR | | |
| 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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