

Total No. of Questions : 8]

SEAT No. :

P3112

[Total No. of Pages : 2

[5354]-602

B.E. (E & TC) (End Semester)

COMPUTER NETWORKS

(2012 Pattern)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) Answer Q.1 or Q.2, Q.3 or Q4, Q.5 or Q6, 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

- Q1)** a) State the names of different layers in OSI Model and explain functions of each layer. [7]
- b) State & explain Stop-and-Wait ARQ Protocol. [7]
- c) Draw the neat diagrams & explain Bus Backbone network & Star Backbone networks. [6]

OR

- Q2)** a) Draw TCP/IP protocol suite. List with example, addresses present at each layer. [7]
- b) What are the common standard fast Ethernet implementations? Explain. [7]
- c) Explain Bluetooth frame format. [6]

- Q3)** a) Explain IPv4 classful addressing and state its disadvantages. [6]
- b) Write short notes on [6]
- i) ARP
- ii) RARP
- c) Explain different multicast routing protocols. [6]

OR

- Q4)** a) Draw and explain the header format for IPv6. [6]
- b) Give general format of ICMP and explain different types of error reporting messages used in ICMP. [6]
- c) Write short notes on DHCP. [6]

P.T.O.

- Q5)** a) Compare between TCP and UDP. Under what circumstances you will use them. [8]
- b) What are four general techniques used to improve quality of service in network? Explain. [8]

OR

- Q6)** a) Explain the TCP Connection management in Client/Server model. [6]
- b) Write a short note on congestion control. [6]
- c) Draw and explain UDP frame format. [4]

- Q7)** a) List various Application layer protocols in TCP/IP and state significance of each. [6]
- b) State & explain different domains in DNS. [6]
- c) Explain the RSA algorithm. Also brief its limitations. [4]

OR

- Q8)** a) What are the main responsibilities of Application Layer? Explain in brief. [6]
- b) Describe the functions of the FTP connections. Explain what kinds of file types FTP can transfer? [6]
- c) What is entity authentication? What are different authentication methods? Explain. [4]

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