

Total No. of Questions : 10]

SEAT No. :

P3829

[5561]-250

[Total No. of Pages : 2

B.E. (Electronics & Telecommunication)

COMPUTER NETWORKS

(2012 Pattern) (Semester - I) (404182)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Use of calculator is allowed.*
- 5) *Assume suitable data, if necessary.*

Q1) a) Draw TCP/IP protocol suite. List with example addresses present at every layer. **[6]**

b) Compare circuit switching and packet switching network. **[4]**

OR

Q2) a) Draw the HDLC frame format. Write function of each field. **[6]**

b) Explain the fast Ethernet networks. **[4]**

Q3) a) What is IEEE 802.11? Explain wireless LAN in brief. **[6]**

b) Compare Bluetooth with Zigbee? **[4]**

OR

Q4) a) Write short notes on : **[6]**

i) Gateway.

ii) Hub.

iii) Routers.

b) What is VLAN? How it is work? **[4]**

P.T.O.

- Q5)** a) List the various protocols giving their significance at network layer. [9]
b) Explain the various classes of IP addressing with their respective ranges. Also list the range of private IP addresses. [8]

OR

- Q6)** a) Give the classification of commonly used Unicast Routing protocols and explain Distance Vector Routing protocol with an appropriate example. [9]
b) With the help of diagram explain IPv4 header format in detail. [8]

- Q7)** a) What are the duties of transport layer? List the services provided by transport layer to upper layers. [8]
b) Explain connection establishment and connection releasing with respect to transport layer. [5]
c) What is socket address? Explain. [4]

OR

- Q8)** a) Draw the TCP header, Explain the function of each field. [8]
b) Explain QoS at transport layer, Also write about transport layer service primitives. [9]

- Q9)** a) Explain : FTP and Telnet protocols. [6]
b) What is DNS? Explain the components of DNS system. [6]
c) What is URL and what are its component. [4]

OR

- Q10)** a) What are the main responsibilities of Application layer? Explain in brief. [6]
b) Explain the RSA algorithm. [6]
c) Write short note on electronic mail system. [4]

