

Total No. of Questions : 10]

SEAT No. :

P3004

[Total No. of Pages : 2

[5669]-596

T.E. (Information Technology)
COMPUTER NETWORK TECHNOLOGY
(2015 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answers 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) Assume suitable data if necessary.

Q1) a) Class B network 150. 160.0.0 with default subnet mask, how can you divide it into 8 equal subnets? How many hosts can be accommodated in each subnetwork? [4]

b) What is the purpose of SMI and MIB in relation to SNMP? [6]

OR

Q2) a) Explain the operation of NAT with suitable example. [4]

b) What is DHCP? What is its advantage? Explain various messages used in DHCP? [6]

Q3) a) What is DNS? What is service hierarchy? Explain domain resolution process? [6]

b) Explain Brief SMTP protocol. [4]

OR

Q4) a) Explain with neat diagram of OSPF routing protocol? [6]

b) Write a short note on Quality of service parameter in Transport Layer.[4]

Q5) a) Explain architecture of Bluetooth? [8]

b) Explain the basic architecture of WLAN and discuss basic component in it. [8]

P.T.O.

OR

- Q6)** a) Explain 802.16 Protocol stack and its frame format. [8]
b) Compare IEEE 802.3 (Wired Lan) and IEEE 802.11 (Wireless LAN.) [8]

- Q7)** a) Write short note on MACAW? [8]
b) Difference between infrastructure network and infrastructure less network.
What are the issues in Ad-hoc sensor network? [8]

OR

- Q8)** a) Describe DSDV routing protocol [8]
b) Short note on Dynamic source routing protocol. [8]

- Q9)** a) Describe each component of sensor node architecture with diagram. [10]
b) Compare LEO, MEO and GEO. [8]

OR

- Q10)** Write short note on following: (any two) [18]
a) SDN
b) IOT
c) LEACH

