

Total No. of Questions : 8]

SEAT No. :

P3536

[5560]-188

[Total No. of Pages : 2

**T.E. (Computer Engineering)
COMPUTER NETWORKS
(2012 Course) (Semster - II)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Assume suitable data, if necessary.*

- Q1)** a) What is requirement of DNS. Explain its working in detail. [8]
b) What are different DHCP messages. Explain with examples. [6]
c) Draw UDP header structure; explain significance of each field in UDP header. [6]

OR

- Q2)** a) Explain in detail RIP protocol. [6]
b) Divide the network 220.123.5.192/26 into 4 sub networks. How many hosts can be connected in each network? Show their IP range, network address and broadcast address. [8]
c) Compare IPv6 and IPv4. Draw and explain IPv6 header format. [6]
- Q3)** a) Explain all versions of 802.11 standard and components. [8]
b) Write short note on following (any 2) [8]
i) WLAN
ii) WAP 2.0
iii) SONET

OR

- Q4)** a) Explain WAP protocol stack. [8]
b) Explain Hidden station and Expose station Problem? [8]

P.T.O.

- Q5) a)** Explain the Architecture diagram of Delay Tolerant Network? [8]
- b)** What are the components of VANET? What do you mean by dedicated short range communication in VANET? [8]

OR

- Q6) a)** Draw and explain VOIP network architecture. [8]
- b)** Explain an application of VOIP in real environment. [8]

- Q7) a)** What is the role of client layers in optical fiber? [8]
- b)** Write short note on (any 2) [10]

- i) Role of Ethernet in Optical Network
- ii) GMPLS
- iii) Virtualization and its types

OR

- Q8) a)** What is ATM? Explain in detail. Explain the Heterogeneous vehicular Communication protocol Module. [8]
- b)** Explain working of SDN in detail with diagram. [10]