

Total No. of Questions : 8]

SEAT No. :

PA-1444

[Total No. of Pages : 2

[5926]-60

T.E. (Computer Engineering)

COMPUTER NETWORKS AND SECURITY

(2019 Pattern) (Semester-I) (310244)

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.
- 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) Explain Path vector routing. **[6]**

b) Give short note on: **[6]**

i) Mobile IP

ii) MPLS

c) 192.168.5.131/26 for given address find out the **[6]**

i) Subnet mask?

ii) What is first ip address for given series?

iii) What is last ip address for given series?

OR

Q2) a) Draw and explain Header format of IPV4. **[6]**

b) Give short note on OSPF. **[6]**

c) List and explain functions of Network Layer. **[6]**

Q3) a) Give the difference between TCP and UDP. **[6]**

b) Explain RTP protocol in detail. **[6]**

c) 06 32 000D 001C E2 17 using this UDP hexadecimal dump find out **[6]**

i) Source port no

ii) Destination port no

iii) Total length of user datagram.

OR

Q4) a) Explain SCTP protocol in detail. **[6]**

b) List and explain transport layer services. **[6]**

c) What is socket? What are different types of socket? Explain socket functions used in connection oriented services with diagram. **[6]**

P.T.O.

- Q5) a)** What is DHCP? Explain DHCP working with client state diagram. [9]
b) Write short notes on FTP and MIME. [8]

OR

- Q6) a)** What is HTTP? Explain HTTP request and reply messages. [9]
b) Write short notes on TELNET and Webmail. [8]

- Q7) a)** Explain IPsec in detail. [6]
b) Differentiate between Symmetric and Asymmetric Key Cryptography. [6]
c) Give short note on Firewalls. [5]

OR

- Q8) a)** Explain model for network security. [6]
b) Explain SSL in detail. [6]
c) Explain Types of Network Attacks. [5]

