

Total No. of Questions : 8]

SEAT No. :

PE-2518

[Total No. of Pages : 2

[6583]-44

T. E. (Computer / Science and Engineering (Data Science))

COMPUTER NETWORKS AND SECURITY

(2019 Pattern) (Semester - V) (310244)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer 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) Give short note on **[6]**

- i) ARP
- ii) RARP

b) Explain Distance vector routing. **[6]**

c) Differentiate between Circuit Switching, Message Switching and Packet Switching. **[6]**

OR

Q2) a) Draw and explain Header format of IPV6. **[6]**

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

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

Q3) a) Draw and explain TCP header format. **[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 less services with diagram. **[6]**

OR

P.T.O.

- Q4)** a) Explain RTP protocol in detail. [6]
b) What is Quality of Service? Explain any two methods to improve QoS?[6]
c) 06 32 00 0D 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.

- Q5)** a) What is DNS? Explain DNS working. [9]
b) Write short notes on FTP and TELNET. [8]

OR

- Q6)** a) What is DHCP? Explain DHCP working with client state diagram. [9]
b) Write short notes on POP3 and Webmail. [8]

- Q7)** a) Draw and explain ITU-T X.800 Security Architecture for OSI. [6]
b) Give short note on HTTPS. [6]
c) Give short note on IDS. [5]

OR

- Q8)** a) Explain Types of Network Attacks. [6]
b) Explain IPSec in detail. [6]
c) Give short note on S/MIME. [5]

