Total No. of Questions : 8]

SEAT No. : [ ]

P-7540

[Total No. of Pages : 2

[6180]-48

T.E. (Computer Engineering)

COMPUTER NETWORKS AND SECURITY

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

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Answer Q.1 or Q.2, Q.3 or Q.4, Q5 or Q6, Q7or Q8.***
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) Give short note on : **[6]**

i) ICMP

ii) IGMP

b) Explain Link state routing. **[6]**

c) 192.168.5.51 / 26 for given address find out the i. subnet mask? ii. what is first ip address for given series?, iii. what is last ip address for given series? **[6]**

Q3) a) Draw and explain TCP header format. **[6]**

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

c) e2 a7 00 0D 00 20 74 9e 0e ff 00 00 00 01 00 00 00 using this UDP hexadecimal dump find out in decimal numbers i. Source port no., ii. Destination port no., iii. Total length of user datagram. **[6]**

P.T.O.

OR

Q4) a) Draw and explain UDP header format. **[6]**

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

c) Explain SCTP protocol in detail. **[6]**

Q5) a) What is DNS? Explain DNS working. **[9]**

b) Write short notes on FTP and TELNET. **[8]**

OR

Q6) a) What is SNMP? Explain SNMP working. **[9]**

b) What is HTTP? Explain HTTP request and reply messages. **[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) Differentiate between Symmetric and Asymmetric Key Cryptography. **[6]**

b) Explain SSL in detail. **[6]**

c) Give short note on Firewalls. **[5]**

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