Total No. of Questions : 8]

SEAT No. : [ ]

PB-3780

[Total No. of Pages : 2

[6262]-38
T.E. (Computer Engineering)
COMPUTER NETWORK 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, Q.5 or Q.6 Q.7 or Q.8.***
2) ***Figures to the right side indicate full marks.***
3) ***Assume suitable data, if necessary.***
4) ***Neat diagrams must be drawn whenever necessary.***

Q1) a) Differentiate between Circuit Switching and Packet Switching **[6]**

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

c) 192.168.5.71 / 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 IPV6. **[6]**

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

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

i) Source port no

ii) Destination port no

iii) Total length of user datagrarn.

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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 HTTP? Explain HTTP request and reply messages. **[9]**

b) Write short notes on SMTP and MIME. **[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) 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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