PA-1444

[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 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]**

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