

B.E. (Computer Engineering) Semester Fifth (C.B.S.)  
**TCP / IP and Internet**

P. Pages : 2

Time : Three Hours



**KNT/KW/16/7362**

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
  2. Due credit will be given to neatness and adequate dimensions.
  3. Assume suitable data wherever necessary.
  4. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain TCP/IP protocol suit. 7  
b) Explain Ethernet frame format in detail 6

**OR**

2. a) What is internet standard? Explain Maturity level of RFC. 6  
b) Explain point to point WANs in detail. 7  
3. a) Explain classful addressing in detail. 6  
b) Explain IPv4 Packet header format. 7

**OR**

4. a) An organization is granted the block 130.34.12.64/26 The organization needs 4 subnets; each with an equal no. of hosts. Design the subnet and find the information about each network. 6  
b) Explain in detail the protocol which is used to find the physical address of host from IP address 7  
5. a) Explain ICMPv4 Error Reporting messages in detail. 8  
b) Explain RIP message formats. 6

**OR**

6. Write short note on. 14  
i) OSPF  
ii) BGP  
7. a) Explain multicasting versus multiple unicasting. 6  
b) What are the three different phases of mobile host in mobile IP? Explain. 7

**OR**

8. a) Explain Membership Query Message in IGMP. 7  
b) Compare RPF, RPB, and RPM. 6

9. a) What is part number? Explain different types of parts? Explain socket address. 6  
b) Explain socket procedure/ calls for connection less communication. 7

**OR**

10. a) Explain TCP segment header format 7  
b) Explain SCTP features in details. 6
11. a) Explain Dynamic Host configuration protocol in detail. 7  
b) Explain different scenarios of electronic mail. 7

**OR**

12. Write short note on. 14
- i) Types of Records in DNS.
  - ii) Message Access Agents of electronic mail.
  - iii) MIME

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