

Roll No. ....

Total No. of Questions : 09]

[Total No. of Pages : 02

**B.Tech. (Sem.<sup>th</sup> - 7<sup>th</sup>)**  
**COMPUTER NETWORKS**  
**SUBJECT CODE : CS - 402**  
**Paper ID : [A0328]**

[Note : Please fill subject code and paper ID on OMR]

**Time : 03 Hours**

**Maximum Marks : 60**

**Instruction to Candidates:**

- 1)** Section - A is **Compulsory**
- 2)** Attempt any **Four** questions from Section - B.
- 3)** Attempt any **Two** questions from Section - C.

**Section - A**

**Q1)**

**(10 × 2 = 20)**

- a) What is the difference between Half duplex and Full duplex?
- b) What is the meaning and application of Repeater?
- c) What are the applications of Transport layer in OSI model.
- d) Explain two main differences between ARP and RARP.
- e) Describe the difference between analog and digital signals.
- f) Explain the following terms: information capacity, bit rate and baud.
- g) Describe the star, bus and ring topology of LAN.
- h) How does the IEEE define LAN.
- i) Compare the advantages and disadvantages of baseband and broadband transmission.
- j) What is the meaning of HTTP.

## Section - B

(4 × 5 = 20)

**Q2)** What is the difference between Message and Packet switching? Explain types of packet switching, in detail.

**Q3)** What is OSI model briefly describe the TCP/IP protocols models.

**Q4)** What is meaning of flow control and its types, Explain in detail.

**Q5)** List and describe three types of addresses used in LAN.

**Q6)** What is Routers, explain its working and applications.

## Section - C

(2 × 10 = 20)

**Q7)** What is error detection explain CRC in detail with the help of example.

**Q8)** List the advantages of UDP over TCP. Describe how TCP is encapsulated in an IP datagram.

**Q9)** Write a short note on any two:

- CSMA/CD
- Token Ring
- FDDI