

Roll No.

Total No. of Questions : 09]

[Total No. of Pages : 02

B.Tech. (Sem. - 5th)
COMPUTER NETWORKS
SUBJECT CODE : CS-303
Paper ID : [A0465]

[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 do you mean by Bandwidth?
- b) What are major transmission impairments?
- c) What are different types of cables are used in Computer Networks?
- d) What is Manchester Encoding?
- e) What are different switching techniques used in data communication?
- f) What are DTE and DCE?
- g) What is Code Division Multiple Access?
- h) What are characteristics of a Cable Modem?
- i) What are different types of errors occurring in data transmission?
- j) What are main differences between OSI and TCP/IP?

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Section - B

(4 × 5 = 20)

- Q2)** What is amplitude modulation and frequency modulation?
- Q3)** What are benefits of spread spectrum? Compare and contrast FHSS with DSSS.
- Q4)** What is Fiber Optics? What are the advantages of optical fiber over twisted-pair and coaxial cable?
- Q5)** What do you mean by VRC, LRC and CRC?
- Q6)** What are the various types of Digital transmission? Discuss.

Section - C

(2 × 10 = 20)

- Q7)** What do you mean by Transmission impairments? What are common transmission impairments? Discuss in detail. How the effect of these impairments can be minimized?
- Q8)** Write notes on:
- (a) Virtual Circuits.
 - (b) DSL technology.
- Q9)** Draw the layer diagram of TCP/IP protocol suite and explain it in detail.

