MAY-08

Roll No.....

Total No. of Questions : 09] [Total No. of Pages : 02

Paper ID [CS303]

(Please fill this Paper ID in OMR Sheet)

B.Tech. (Sem. - 5th)

COMPUTER NETWORK (CS-303)

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) Define the difference between FDM and TDM.
b) Define the difference between synchronous and as synchronous transmission.
c) Define the difference between switched and leased line.
d) What do you understand by wireless transmission?
e) Define about the circuit switching with example.
f) Describe the term cable modem.
g) Explain the three major classes of guided media.
h) A signal has a bandwidth of 30 Hz. The highest frequency is 80 Hz, what is lowest frequency? Draw the spectrum if the signal contains all frequencies of same amplitude?
i) Why synchronization is a problem in data communication?
j) What factors affect the data rate of a link?

Section - B

(4 × 5 = 20)

Q2) Describe the DS hierarchy.

Q3) Define the difference between packet and circuit switching.

Q4) Define the analog to analog conversion.

Q5) Contrast a periodic signal with aperiodic signal.

Q6) What is the limiting factor in the size of a bus topology? Include a discussion of taps in your answer.

Section - C

(2 × 10 = 20)

Q7) (a) Explain the two types of switches used in circuit switching? Explain in detail.
(b) Explain the two types of TDM implementation and how do they differ from each other.

Q8) (a) How does CRC checker know that the received data unit is undamaged? Explain it with example.
(b) Describe the analog hierarchy in which groups of signals are successively Multiplexed onto higher bandwidth line.

Q9) (a) Define the four types of redundancy checks used in data communication. Explain it with example.
(b) Explain about the WDM multiplexing.