

Exam-Code: 0917  
Sub. Code: 6786

1078  
B. Engg. (Computer Science and Engineering)  
5<sup>th</sup> Semester  
CS-501: Data Communication and Networks

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Q. No. 1 which is compulsory and selecting atleast two questions from each Unit.

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I. Attempt the following: -

- (a) List important features of GEO satellites.
- (b) What is NRZ-I encoding?
- (c) What is 10 Base 5?
- (d) What is ARPANET?
- (e) Define Routing. (5×2)

**UNIT-I**

II. Compare and contrast circuit switching, virtual circuit switching, message switching and packet (Datagram) switching with suitable examples. (10)

III. What is multiplexing? Describe various multiplexing methods with examples. (10)

IV. Explain and compare wired Ethernet LAN, wireless LAN and ATM LAN. (10)

**UNIT-II**

V. Explain the working principles of ARP and RARP protocols with examples. (10)

VI. (a) Compare the important features of ISDN and broadband ISDN. (5+5)  
 (b) Explain the important features of AAL.

VII. Write short notes on the following: -

- (a) HDLC (5+5)
- (b) Bridges

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