

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(CSE)/(IT) (2011 Onwards) (Sem.–4)

**COMPUTER NETWORKS-I**

Subject Code : BTCS-403

M.Code : 56606

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.

**SECTION-A**

**Answer briefly :**

1. Explain in brief about Network Topologies.
2. Differentiate between Wired and Wireless Networks.
3. What are Advantages and Disadvantages of Infrared wireless transmission?
4. Explain in brief the term Noise in reference to transmission impairments.
5. Explain the term checksum in reference to error detecting codes.
6. Differentiate between TCP and UDP Protocols.
7. What is IP addressing? How it is classified?
8. Define the term HDLC.
9. What do you mean by congestion? Also explain the cause of congestion?
10. Explain in brief about the term FTP.

## SECTION-B

11. Write a brief note on following Differentiate between Circuit Switching, Packet Switching and Message switching. (5)
12. Write a detailed note on Go-back-N ARQ Sliding window protocol. (5)
13. Write a brief note on Network Layer Design Issues. (5)
14. Write a detailed note on connection establishment in case of transport Layer.
15. Write a brief note on following terms :
  - (a) Domain Name System (3)
  - (b) World Wide Web (2)

## SECTION-C

16. Write a detailed note on TCP/IP reference Model. Also compare TCP/IP and OSI reference model. (10)
17. (a) Write a brief note on Frequency Division and Time Division Multiplexing techniques. (5)  
(b) Write a detailed note on ALOHA. (5)
18. Write a detailed note on Distance Vector Routing. (10)

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**