Roll No. Total No. of Pages : 02

Total No. of Questions : 16

BCA (Sem.–3)

COMPUTER NETWORKS

Subject Code : UGCA-1913

M.Code : 78179

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**

SECTION-A

Write briefly :

1) What is half-duplex communication?

2) What is the difference between MAN and WAN?

3) Define the frequency spectrum.

4) What is Multiplexing?

5) Explain the Leaky Bucket theory.

6) Describe Hub, Switch, and Router.

7) What is the principle of Optimality?

8) Explain data compression techniques.

9) Describe the following :

   a) FTP

   b) WWW

   c) DNS

   d) HTTP

10) How does token ring work?

SECTION-B

11) What is IEEE Standards? Explain various IEEE 802 standards for LAN.

12) What is Frame? Explain Frame format.

13) What is the wireless transmission? Explain the use of Radio and Microwave transmission.

14) Explain the layer of TCP/IP Model. What is the significance of TCP/IP Model?

15) What are the design issues of the Transport Layer? Explain elements of Transport protocols.

16) Describe the working principles and application of coaxial cable, twisted pair cable, and fiber optical transmission.

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