

**Roll No.**

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**Total No. of Pages : 02**

**Total No. of Questions : 07**

**BCA (Sem.-3)**  
**COMPUTER NETWORKS**  
**Subject Code : UGCA-1913**  
**M.Code : 93331**  
**Date of Examination : 11-01-23**

**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

**1. Write briefly :**

- a. Compare digital and analog transmission.
- b. What is full duplex in communication.
- c. Differentiate MAN and WAN.
- d. Compare OSI and TCP/IP model.
- e. Define Attenuation.
- f. Discuss PPP protocol.
- g. What is CSMA/CD/CA?
- h. Write a short note on congestion control policies.
- i. Write the function of internetworking.
- j. Define concept of Cryptography.

## SECTION-B

2. What are the different topologies in networks? Write their advantages and disadvantages.
3.
  - a. Discuss data compression.
  - b. Compare and contrast message switching and packet switching.
4. What do you mean by Routing? Explain the working of shortest path routing.
5. What are the responsibilities of the data link layer? Explain the process of error detection and recovery in data communication.
6. Explain the IEEE Token Bus and Ring standards used in computer networks.
7. What is the purpose of Application Layer? How distributes applications are used in this layer?

**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.**