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Total No. of Pages : 02

Total No. of Questions : 09

M.Sc. (IT/PGDCA) (Sem.-2)

**COMPUTER NETWORKS**

Subject Code : PGCA-1910

M.Code : 77839

Date of Examination : 06-07-22

Time : 3 Hrs.

Max. Marks : 70

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C. have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION - B & C.

**SECTION-A**

**1. Write briefly :**

- a. What are the functions of Application layer?
- b. What are the functions of bridges?
- c. What are the metrics used in determining the best path for a routing protocol?
- d. What is the advantage of FDDI over a basic token ring?
- e. What is multicasting?
- f. Write a short note on HTTP.
- g. State the purpose of layering in networks?
- h. What is ethernet? What are its advantages?
- i. What do you mean by Digital Signatures?
- j. Differentiate between routers and gateways.

## SECTION-B

2. Explain in detail the CSMA/CD protocols of Ethernet.
3. Discuss the various applications of Computer Networks. Also, discuss the different features of LAN and MAN.
4. Explain the OSI model of computer network with a neat diagram.
5. With a neat diagram, describe in detail about the Network architecture.

## SECTION-C

6. Explain in detail the distance vector routing algorithm.
7. What is congestion? How is it caused? What are the factors that contribute to congestion? Describe any one congestion control method with its advantages and disadvantages.
8. What is IPv6? Explain its advantages over IPv4. Also, explain its frame format.
9. Explain the working of Electronic mail. How SMTP is used in Email applications?

**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.**