

Roll No.

Total No. of Pages : 02

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B.Voc. (Hardware and Networking) (Sem.-1)

COMPUTER NETWORKING

Subject Code : BVHN-102-18

M.Code : 75802

Date of Examination : 12-01-23

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 **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

1. Answer briefly :

- What is multiplexing?
- List **any two** application layer protocols.
- What is error control?
- Compare Serial and Parallel Communication.
- Define MAN.
- What is the limitation of parity checking?
- What is the advantage of layered architecture?
- What is flow control?
- What is the need of having a different IP address and MAC address?
- In which type of switching do all the datagrams of a message follow the same channel of a path?

SECTION-B

2. What is the importance of data link layer? What services it provides to network layer?
3. Explain in detail about OSI model. Show the diagram of how the data transmission takes place from sender to receiver.
4. Explain IEEE 802.4 Token Bus topology.
5. List the advantages and disadvantages of using optical fibers.
6. Explain the structure of a switch. How is it different from a hub?

SECTION-C

7.
 - a) Explain in detail the design issues of transport layer protocols.
 - b) Explain in brief : E-Mail, WWW, DNS.
8. Explain various static routing algorithms used by the network layer.
9. Explain the different causes of congestion in a network. Explain **any one** congestion control algorithm that can be used for detection and prevention of congestion.

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.