

**830**

Total Pages : 3

Roll No. ....

## **MIT(CS)-403**

### **Introduction to Networking**

M.Sc. Cyber Security (MSCCS-18/21)

4th Semester Examination, 2021 (Winter)

**Time : 2 Hours]**

**Max. Marks : 80**

**Note :** This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

### **SECTION–A**

#### **(Long Answer Type Questions)**

**Note :** Section 'A' contains Five (05) long answer type questions of Twenty (20) marks each. Learners are required to answer any Two (02) questions only.

(2×20=40)

1. Discuss in detail about OSI Model.
2. Explain the LAN and MAN networks with a neat diagram.

3. Explain and compare the characteristics of Guided and Unguided Transmission media.
4. What is Internet? Explain the Applications of Internet.
5. What is the basic concept of Multiplexing? Explain the types of Multiplexing techniques.

### **SECTION-B**

#### **(Short Answer Type Questions)**

**Note :** Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only. (4×10=40)

1. Explain the five components of a Data Communication system.
2. Explain the following terms :
  - (a) Parallel Transmission
  - (b) Serial Transmission
3. What is simplex, half duplex and full-duplex? Explain with the help of an example.
4. Explain the difference between Checksum and Cyclic Redundancy Check.

5. Differentiate between Flow Control and Error Control.
  6. What is HDLC? Explain the Operational Modes of HDLC.
  7. What is the difference between circuit switching and packet switching?
  8. What is firewall? Explain the Types of firewall.
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