### C1010

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

### **Introduction to Networking**

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

4th Semester Examination, 2022 (June)

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.

 $(2 \times 20 = 40)$ 

**1.** Define computer Network. Explain different types of Computer Networks.

- **2.** What is topology? Explain various network topologies in brief.
- **3.** Explain connection oriented and connectionless services in brief.
- **4.** What is Internet? What are the applications of Internet explain in brief.
- **5.** Define Transmission Media. Explain the difference between Guided and Unguided Transmission media with an example.

#### **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 difference between OSI and TCP/IP model.
- **2.** Explain the various types of multiplexing.
- 3. Write short note on:
  - (a) ISDN.
  - (b) Frame Relay.
  - (c) Virtual Circuits.
  - (d) Asynchronous Transfer Mode.

- **4.** Explain the concept of ALOHA.
- **5.** Explain Bluetooth Architecture in detail.
- **6.** Explain the following terms :
  - (a) Broadcast networks.
  - (b) Point-to-point networks.
- **7.** What is Data and Signal? Explain the components of data communication.
- **8.** What is Digital Signal? Explain the difference between Baseband and Broadband Signal.