C1045

Total Pages: 3 Roll No.

MIT(CS)-204

Cryptography & Network Security

Master Of Science (Cyber Security (MSCCS-21)

2nd 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. What is Network Security? Explain Different Types of Security.

- **2.** What is key management? Explain different types of Public key distribution technique.
- **3.** Explain the various protocols used in SSL.
- **4.** Explain the working of Electronic Code Book (ECB) and Cipher Block Chaining (CBC) mode of DES.
- **5.** Explain digital signature process with neat diagram.

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. Differentiate between monoalphabetic ciphers and polyalphabetic ciphers and give one example for each.
- **2.** What is Cryptography? What are the applications Network Security? Explain.
- **3.** Explain briefly block cipher design principle.
- **4.** Explain briefly working of AES.
- **5.** Draw the block diagram of DES algorithm. Explain briefly.

- **6.** Briefly explain the security services and mechanisms.
- 7. What is firewall? Explain different types of firewall.
- **8.** What is Security Attack? Explain Active attack and Passive attack with an example.