**Roll No.** | | | | | | | | | | | | | **Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Tech. (CSE) (Sem.–7,8)**

# NETWORK SECURITY AND CRYPTOGRAPHY

**Subject Code : BTCS701-18**

**M.Code : 90487**

**Date of Examination: 22-11-2024**

**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. Write briefly:**

a) Vulnerability

b) Attack

c) Encryption

d) Cipher

e) Hash Function

f) Active Attack

g) Digital Signature

h) Strong Authentication

i) IDS

j) Roll of Modular arithmetic.

## SECTION-B

2. Explain in detail the working of CIA Model.

3. Briefly explain Euclidean and Extended Euclidean algorithms.

4. Explain in detail the purpose of using Feistal Cipher Structure.

5. How Secure Hash Function works? Explain in detail.

6. How Email security is achieved?

## SECTION-C

7. Write a note on Block Ciphers (DES and AES).

8. Write a note on Kerberos.

9. Explain in detail Various Controls available for Network Security.

**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**.