

Roll No

MCADD-803

M.C.A. (Integrated), VIII Semester

Examination, November 2023

Network Security

Time : Three Hours

Maximum Marks : 70

- Note :** i) Attempt any five questions.
ii) All questions carry equal marks.

✓ 1. a) Explain the Block Cipher Modes of operations. 7

✓ b) Discuss the strengths of DES algorithm. 7

✓ 2. a) Explain the RSA algorithm in detail. 7

✓ b) Give a brief note on elliptic curve cryptography. 7

3. a) Discuss the steps involved in Secure Hash Algorithm (SHA-512). 8

b) List and explain the parameters of X.509 Authentication service. 6

4. a) Define web security. Explain SSL architecture in detail. 8

b) Discuss how online transaction secured using SET protocol? 6

5. a) Briefly explain the firewall design principles. 6
b) List and explain various types of computer viruses and its countermeasures. 8

6. a) List and explain the key distribution approaches for symmetric encryption. 7

b) Explain the Chinese remainder theorem in cryptography. 7

7. a) Explain the HMAC algorithm in detail. 7

b) Discuss Authentication Header (AH) in detail. 7

8. Explain any two of the following: 14

a) Triple DES

b) ripemd-160

c) Security Associations

d) Threat vs. Virus
