Roll No ....

MCADD-803
M.C.A. (Dual Degree/Integrated Course), VIII Semester
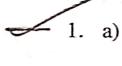Examination, May 2018
Network Security
Time : Three Hours

Maximum Marks : 70

Note : i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain the terms Authentication, confidentiality, Integrity, Non-repudiation. Also give the difference between steganography and cryptography.   7

    b) Describe the model of Network Security.   7

2. a) Explain the following: 7
    i) Honeypots
    ii) Active attacks
    iii) System Integrity Verifiers
    iv) Sniffing and Snooping

    b) What are the key principles of security? What are various security mechanisms to achieve security goals?   7

3. a) What is Public key cryptography? Explain bring out the difference between conventional encryption and public key encryption.   7

    b) Explain the classes of message authentication functions.   7

4. a) What is digital signature? What are its requirements? Discuss arbitrated digital signature and direct digital signature.   7

   b) What do you understand by web security? What are various web security protocols? Explain any one.   7

5. a) Discuss the following: 7

      i) E-mail Viruses

      ii) Digital immune system

      iii) Vulnerabilities

   b) What is Kerberos? What are the design requirements of Kerberos? How does Kerberos work? What are its applications?   7

6. a) What do you mean by firewall? When the system administrator trusts the internal users. What types of firewall is to be used? What are its advantages and disadvantages?   7

   b) Briefly describe the types of viruses.   7

7. a) Explain three classes of intruder.   7

   b) What do you mean by intrusion? Explain types of IDS detection techniques.   7

******