Printed Pages—3   MCAE25

M.C.A.

(SEM.V) THEORY EXAMINATION 2011-12
INFORMATION SECURITY AND CYBER LAWS

Time : 3 Hours   *Total Marks : 100*

Note :– (1)   Attempt **all** questions.

(2)   All questions carry equal marks.

1.   Attempt any **two** parts of the following :

(a)   Discuss various types of security attacks with the help of suitable examples. Some attacks are called as passive attack while others are called as active attack. Why ?

(b)   Explain the function of following :

(i)   Domain Name Server

(ii)   Router

(iii) Gateway

(iv) MODEM

(c)   Describe the various layers in TCP/IP model.

2. Attempt any **two** parts of the following :

(a) Explain the following terms clearly :

   (i) Authentication

   (ii) Encryption

   (iii) Public Key

   (iv) Denial of Service.

(b) What are the requirements of an electronic payment systems ? Briefly describe the credit card based payments systems.

(c) Explain the following in brief :

   (i) EDI

   (ii) E-Cash.

3. Attempt any **two** parts of the following :

(a) What is difference between biometrics and forensics ? What is biometric template ? What are design issues in development of biometric systems ?

(b) Briefly discuss the purpose and process of ISO 27001 certification.

(c) "For greater security, one has to compromise with privacy." Give argument in favor or against the statement.

4. Attempt any **two** parts of the following :

(a) What do you understand by Virtual Private Network (VPN) ? What are the usage of VPN ? Explain the concept of tunneling in VPN.

(b) How does digital signature differ from conventional ink based signature ? What are the properties that a digital signature should have ? Discuss the uses of digital signature.

(c) What do you understand by network intrusion ? What is difference between Intrusion detection system and firewall ? Explain.

5. Write short notes on any **two** of the following :

(a) Challenges in Digital Rights Management (DRM)

(b) Legal Issues in E-Business Management.

(c) Indian IT Act 2000.