MCS-215

MASTER OF COMPUTER APPLICATIONS (MCAOL)

SECURITY AND CYBER LAWS

Time : Three Hours

Maximum Marks : 100

Note : Attempt questions from all Sections as instructed.

Section-I (Short Answer Type Questions) (5×4=20)

Attempt any five questions. Each question carries 4 marks.

1. List any four advantages of digital security.

2. Explain the substitution cypher with the help of an example.

3. What are the purposes of security audit? Explain.

4. List the four categories of government policies and laws regarding regulating the Internet content.

5. How has the issue of jurisdiction of Indian Courts with respect to offences committed outside India been dealt with by the IT Act, 2000 of India?

6. What is cybersquatting in the context of domain names? Explain with the help of an example.

7. What is digital security? Define the terms confidentiality, integrity and availability in the context of digital security.

Section-II (Medium Answer Type Questions) (5×10=50)

Attempt any five questions. Each question carries 10 marks.

8. Explain the concept of public key cryptography. What are the advantages and disadvantages of public key cryptography? Compare the public key cryptography with symmetric key cryptography.

9. Explain the following in the context of cyber security:

i) Phishing attacks

ii) State-sponsored attacks

iii) E-mail security

iv) Back-up of data

10. Explain the reasons for the need of regulation of cyberspace. List the strategies for regulating the cyberspace.

11. Explain the broad classification of cyber crimes. How are cyber crimes different from traditional crimes? List any four penalties or compensations that wrongdoer is liable to pay to the effected party.

12. Explain the following forms of intellectual property:

i) Copyright and related rights

ii) Patents

iii) Trademarks

iv) Trade secrets

13. Explain the following security issues/breaches in cyberspace:

i) Distributed Denial of service attack

ii) Malware

iii) Internet of Things attack

iv) Key loggers

v) Website defacement

14. Explain the following cryptographic algorithms with the help of an example for each:

i) DES

ii) RSA

Section-III (Long Answer Type Questions) (2×15=30)

Attempt any two questions. Each question carries 15 marks.

15. a) Explain the concept of security management. Also, explain the six principles of security management.

b) What are the uses of filtering devices and rating systems in the context of regulating the cyberspace ?

c) Define the term pseudorandom numbers with the help of an example.

16. Explain the following in the context of cyber security:

a) Cyber Forensics

b) Liability of network service providers

c) Appellate Tribunal

17. Write short notes on the following:

a) Digital signature

b) Authentication and authorisation

c) Linking and inlining in the context of intellectual property rights