2022

M.Sc.

4th Semester Examination COMPUTER SCIENCE PAPER—COS-403

ELECTIVE-III (INFORMATION SECURITY)

Full Marks: 50

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

1. Answer any four questions:

4×2

- (a) What is information security?
- (b) Define spoofing.

- (c) What do you mean by exploits?
- (d) Define policy.
- (e) Why is it important to study Feistel cipher?
- (f) What is firewall? How does it differ from gateway?
- 2. Answer any four questions: 4x4
 - (a) List any eight cyber prevention techniques.
 - (b) Explain mono alphabetic substitution cipher.
 - (c) Who Are Hackers? What are the two Hacker levels?
 - (d) Distinguish between asymmetric and symmetric encryption.
 - (e) What are the features of a good encryption technique?
 - (f) Describe any four types of malicious code.

3. Answer any two questions:

- 2×8
- (a) What is the difference between attack and vulnerability? List and explain any five attacks.
- (b) Explain CIA triad in information security.
- (c) Briefly explain the AES encryption technique.
- (d) Briefly explain the DES encryption technique.

[Internal assessment - 10]