QP CODE

H1157

Enrollment Number: ……

Name: ……

FOUR YEAR UNDER GRADUATE DEGREE EXAMINATIONS, MARCH 2026

Third Semester

Common for B.A (Honours) English/ Malayalam/History/Sociology/ B.B.A (Honours)/B.Com (Honours)

SGB24CA103MD – Information Security
(2024 July admissions)

Time: 2 Hours **Max. Marks: 45**

Section A

Answer any five of the following questions in a word or sentence each. Each question carries 1 mark.

1. Define Confidentiality.
2. State the meaning of Cryptanalysis.
3. Give the meaning of Risk Avoidance.
4. Define Vulnerability.
5. State the meaning of Authorization.
6. Define Two-Factor Authentication.
7. Provide a definition of Malware.
8. Give the meaning of a Trusted Operating System.

(1X5=5)

Section B

Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.

9. Briefly explain Integrity with an example.
10. Differentiate between Symmetric and Asymmetric key algorithms.
11. List the main steps in Risk Assessment.
12. Explain Attack Vectors with any one example.
13. Write a short note on Identification in Identity Management.

14. List any two challenges in Risk Identification.
15. What is meant by non-repudiation?
16. List any two security functions of an Operating System.

(2X5=10)

Section C

Answer any four of the following questions in one page each. Each question carries 5 marks.

17. Explain the CIA triad and its relevance in information security.
18. Describe the Taxonomy of Cryptography and Cryptanalysis.
19. Discuss Risk Mitigation strategies with suitable examples.
20. Explain Threats and Vulnerabilities in information systems.
21. Compare Password-based and Challenge–Response based authentication methods.
22. Describe Virus, Worms and other malware types with examples.

(5X4=20)

Section D

Answer any one of the following questions in three pages each. Each question carries 10 marks.

23. Explain Authentication Protocols in detail. Discuss Two-Factor Authentication and modern authentication models with illustrations.
24. Describe Next Generation Secure Computing Base (NGSCB). Explain its architecture, security mechanisms, advantages and limitations.

(10X1=10)