2025

M.Sc. 3rd Semester Examination

COMPUTER SCIENCE

Paper : COS - 302

(Network Security)

Full Marks : 25 Time : One Hour

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Group - A

Answer any *two* questions : 2×2=4

1. What is data integrity?
2. What is public key cryptography?
3. What do you mean by security threats?
4. What is cipher?

Group - B

Answer any *two* questions : 4×2=8

5. Explain session keys and their importance in secure communication.
6. What are S-boxes and state their role in DES?

P.T.O.

7. Write the main feature and uses of secret key cryptography.

8. Describe the play fair cipher with a suitable example.

Group - C

Answer any *one* question : 8×1=8

9. (a) Write short note on Block Cipher vs. Stream Cipher.

   (b) Discuss the importance of Avalanche Effect in DES and AES. 4+4

10. Explain RSA algorithm for key generation, encryption and decryption with example.

Internal Assessment : 5 marks