Total No. of Questions : 8]   [Total No. of Printed Pages : 1

Roll No ....

IT-801 (GS)

B.E. VIII Semester Examination, June 2020

Grading System (GS)

Information Security

Time : Three Hours

Maximum Marks : 70

Note: i)   Attempt any five questions.
      ii) All questions carry equal marks.

1. a) Define security. What are multiple layers of security?
   b) Describe the critical characteristics of information. How are they used in computer security?

2. a) What is the purpose of the S-boxes in DES? Explain the avalanche effect.
   b) What is steganography? How is it differs from cryptography?

3. Define following attacks in detail.
   a) SQL injection attack
   b) Phishing attack
   c) Ransomware attack

4. Write the difference between diffusion and confusion. Explain with suitable example.

5. Explain hash function in detail. What characters are needed for secure hash function?

OR

Explain Euclidean algorithm. Solve gcd (1970, 1066) using Euclidean algorithm.

6. Define the following term related to cryptography.
   a) Cipher   b) Plaintext
   c) Cryptology   d) Cryptanalysis
   e) Integrity   f) Availability

7. Explain following term
   a) E-mail security   b) Penetration testing

OR

Explain Transport Layer Security (TLS). Explain its applications and functions.

8. Write short notes on any two :
   a) Firewalls
   b) Eavesdropping
   c) Diffie Hellman key exchange
   d) Web security

******

IT-801 (GS)