6TH SEM./CSE/IT/ 2022(S)

TH1 Cryptography and Network security

Full Marks: 80 Time- 3 Hrs

Answer any five Questions including Q No.1& 2
Figures in the right hand margin indicates marks

1. Answer **All** questions 2 x 10

   a. Differentiate between substitution technique and Transposition technique.
   b. Define Rail Fence technique.
   c. Where SSL layer is located in TCP/IP?
   d. Define seed.
   e. Write the problem associated with clear text password.
   f. Define IP address spoofing
   g. Define static web page and Dynamic web page.
   h. What are the problems with symmetric key cryptography?
   i. Define VPN.
   j. Define Brute-force attack.

2. Answer **Any Six** Questions 6 x 5

   a. Discuss about different types of attack.
   b. Difference between symmetric and asymmetric key cryptography.
   c. Discuss the mechanism used by a RA for checking the user's proof of possession of the private key.
   d. Discuss about screen host firewall, single-homed Bastion configuration.
   e. Discuss about PKIX Services.
   f. Discuss about Digital Envelop.
   g Discuss about Authentication token.

3 Briefly Discuss about key principle of network security. 10

4 Define digital certificate. Write the step to create digital certificate. 10

5 Define SSL and discuss how SSL works? 10

6 Discuss about DES and how it works. 10

7 Explain about IP Security. 10