

22672

M. Tech (CSE) 3rd Semester (CBCS Scheme)

Examination, December-2022

NETWORK SECURITY

Paper-16CSE23C2

*Time allowed : 3 hours]*

*[Maximum marks : 100*

*Note : Question No. 1 is compulsory. Attempt four more questions selecting one from each unit. All questions carry equal marks.*

1. Write a short note on the followings :
  - (i) Differentiate Plain text and cipher text.
  - (ii) How is Steganography different from Cryptography ?
  - (iii) Explain Secure Socket Layer (SSL) ?
  - (iv) What is an Intrusion detection system ?

**Unit-I**

2. Differentiate between symmetric and asymmetric key cryptography by taking a suitable example.
3. Explain Classical Encryption techniques with suitable examples.

**Unit-II**

4. What is RSA algorithm ? Explain it. In a RSA algorithm, it is given that  $p = 7$ ,  $q = 11$ ,  $e = 17$  and  $M = 8$ , find the cipher text 'C' and decrypt the 'C' to set the plain text M.
5. Explain advanced Encryption Standard (AES) in detail by taking a suitable example.

**Unit-III**

6. Explain SHTTP. How it is different from HTTP ? Also, highlight the feature of the Time Stamping Protocol (TSP).
7. What is Transport Layer Securities (TLS) ? How is it different from SSL. Compare them.

**Unit-IV**

8. What is Firewall ? Give types of Firewalls and also discuss the Firewalls design principles.
9. Write a short note on the following :
  - (a) Kerberos
  - (b) Malicious Codes