M.Tech 3rd Semester (CSE) (CBCS) Scheme
Examination, December–2018
NETWORK SECURITY
Paper–16CSE23C2

Time allowed : 3 hours] *[Maximum marks : 100*

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

1. Write short notes on the following:

(i) What is Crypt-Analysis?

(ii) Differentiate between Steganography and Cryptography.

(iii) Encrypt the plain text 'HAND' using hill cipher with the key $\begin{matrix} 5 & 8 \\ 17 & 3 \end{matrix}$ and verify the result.

(iv) Encrypt the plain text 'HELLO' using Playfair cipher with key 'EXAM'.

(v) What is Masquerade?

(vi) What is Phishing Attack?

(vii) Explain Denial of Service.

(viii) What is Trojan?

Unit - I

2. What is Cryptographic system? Explain in detail. Also write about Symmetric and Asymmetric key models.

3. Explain Services, Mechanisms and Attacks on the OSI security architecture in detail.

Unit - II

4. Explain AES and DES in detail.
5. Explain the RSA algorithm by taking a suitable example.

Unit - III

6. Explain Secure Hyper Text Transfer protocol (SHTTP). Also highlight the feature of Time Stamping Protocol (TSP).
7. What is SSL and also describe sequence of events that are required for transaction using SET.

Unit - IV

8. What is Kerberos authentication service? Explain in detail with its types. Also write its drawbacks and limitations.
9. Write a short note on the following:
   (a) Firewall
   (b) Intrusion Detection System