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 $\frac{5}{17}$ 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