

Roll No.

OLE-22672

M.Tech. 3rd Semester (CSE) CBCS Scheme Examination – April, 2021

NETWORK SECURITY

Paper : 16CSE23C2

Time : Three hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

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

1. Write the short notes on the following :

- (i) What is Crypt-Analysis ? Give its different mechanisms.
- (ii) How is Steganography different from Cryptography ?
- (iii) Encrypt the plain text 'HELLO' using Playfair cipher with key 'EXAM'.
- (iv) What is Masquerade ?
- (v) Differentiate between Sniffing and Spoofing Attack.
- (vi) Explain DOS.

UNIT – I

2. What is RSA Algorithm ? In a RSA Algorithm it is given that $p = 7$, $q = 11$ and $e = 17$ and $M = 8$ find the cipher text 'C' and decrypt the 'C' to set the plain text M.
3. Explain Services, Mechanisms and Attacks on the OSI security architecture.

UNIT – II

4. Explain AES and DES in detail and differentiate between them.
5. Explain Diffie Hellman Key exchange in detail by taking suitable example.

UNIT – III

6. Explain SHTTP. How it is different from HTTP ? Also highlight the feature of Time Stamping Protocol (TSP).
7. Differentiate between SSL and SET by explaining them in detail.

UNIT – IV

8. What is Kerberos ? Explain in detail with its types. Also write its drawbacks and limitations.
9. What is Firewall ? Give Types of Firewalls also discuss the Firewalls design principles in detail.