D 111134   (Pages : 2)   Name...

Reg. No.....................................

THIRD SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, NOVEMBER 2024

(CBCSS)

Computer Science

CSS 3E 02 C—CRYPTOGRAPHY AND NETWORK SECURITY

(2019 Admission onwards)

Time : Three Hours   Maximum : 30 Weightage

Section A (Short Answer)

Answer any **four** *questions.*
Each question carries 2 *weightage.*

1. Outline symmetric encryption principles.

2. What do you mean by cryptanalysis ?

3. What do you mean by message authentication ?

4. What is a digital signature ?

5. What is Public Key Infrastructure ?

6. List the key web security considerations.

7. What is a Firewall ?

(4 × 2 = 8 weightage)

Section B (Short Essay)

Answer any **four** *questions.*
Each question carries 3 *weightage..*

8. Summarize the working of RC4.

9. Explain one way hash function.

10. Write a note on Message Authentication Codes.

11. Explain federated identity management.

12. Outline SSL architecture.

Turn over

13. Write a note on HTTPS.

14. Write a note on Intrusion detection.

(4 × 3 = 12 weightage)

Section C (Essay)

*Answer any **two** questions.*
Each question carries 5 weightage.

15. Explain Fiestal Cipher structure. Summarize the operations in DES.

16. Discuss public key cryptography principles.

17. Summarize Kerberos V4.

18. Discuss in detail the different types of malicious software. Summarize the characteristics of Firewalls.

(2 × 5 = 10 weightage)