



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – APRIL 2018

CS 2823- CRYPTOGRAPHY & NETWORK SECURITY

Date: 21-04-2018
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

SECTION-A

ANSWER ALL THE QUESTIONS:

(10 X 2 = 20)

1. What is cipher text?
2. Mention transposition techniques.
3. What is symmetric encryption?
4. Represent Triple Encryption with a diagram.
5. State the purpose of digital signatures.
6. Define authenticator.
7. Mention the usage of TLS.
8. Write the message format of SSL connection.
9. What are HoneyPots?
10. Write any two password selection strategies.

SECTION-B

ANSWER ALL THE QUESTIONS:

(5 X 8 =40)

11. a) Discuss Symmetric Cipher Model with a neat diagram.
(OR)
b) Explain about the security services in OSI Security architecture.
12. a) Explain in brief the operations involved in Blowfish.
(OR)
b) What are stream ciphers and explain RC4 in detail with a neat diagram.
13. a) What is Key Management and explain about Diffie Hellmann Key Exchange.
(OR)
b) Explain Message Authentication Codes.
14. a) Describe the salient features of KERBEROS.
(OR)
b) Discuss briefly about PGP Services.
15. a) Elaborate the two different approaches of Intrusion Detection System.
(OR)
b) Explain about the different phases of a virus in its lifetime.

SECTION-C

ANSWER ANY TWO QUESTIONS:

(2 X 20 = 40)

16. (a) Discuss in detail about the encryption and decryption techniques involved in Simplified DES.
(b) Elaborate Playfair Cipher and the rules for encryption with an example.
17. (a) Explain MD5 in detail with the explanation of the various steps involved.(10)
(b) Discuss in detail about IPSec Architecture. (10)
18. (a) Elaborate in detail the different types of viruses. (10)
(b) Discuss about the types of firewall. (10)

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