 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **COMPUTER SC.**

SECOND SEMESTER – APRIL 2011

# CS 2813 - CRYPTOGRAPHY & NETWORK SECURITY

Date : 12-04-2011 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**SECTION-A**

**ANSWER ALL THE QUESTIONS: (10 x 2 = 20)**

1. Write down the difference between services and mechanisms
2. What is the functionality of X.800
3. What are the characteristics of a random number?
4. Write down the categories of public key Cryptosystems.
5. List out the message authentication functions
6. What are birthday attacks?
7. What are the parts of the signature compound?
8. What are the components of private key ring?
9. What are honey pots?
10. What is Zombie?

**SECTION-B**

**ANSWER ALL THE QUESTIONS**: **(5 x 8 =40)**

11. a) Explain cryptographic systems and cryptanalysis

(OR)

b) Explain OSI security architecture

12. a) What is meet in the middle attack and how it is resolved?

(OR)

b) Write down the requirements of Cryptography.

13. a) Explain authentication requirements

(OR)

b) Explain Message authentication code.

14.a) Write down the applications of IPSec.

(OR)

b) Explain SSL architecture.

15. a) Explain Intrusion Techniques.

(OR)

Explain password protection methods

**SECTION-C**

**ANSWER ANY TWO QUESTIONS: (2 x 20 = 40)**

16. i)) Explain the modes of operation of Block Cipher

ii)Explain RC5 algorithm

17. i) Explain Diffie- Hellman Key exchange algorithm

ii) Explain Digital Signature in Secured Electronic Transaction.

18. i) Explain different types of Firewalls.

ii)Explain Simplified DES in Detail.

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