# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



#### M.C.A. DEGREE EXAMINATION - COMPUTER APPLICATIONS

FIFTH SEMESTER - NOVEMBER 2015

#### **CA 5810 - NETWORK SECURITY**

Date · 1	11/11/2015	Dept. No.	Max.: 100 Marks
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11me: U	9:00-12:00		

#### PART-A

#### Answer ALL the questions.

10 x 2=20

- 1. Name the aspects of information security.
- 2. What are the four tasks performed by network security model?
- 3. Differentiate worms, viruses and Trojan horses.
- 4. What is reconnaissance? List the attacks.
- 5. Bring out the difference between block and stream ciphers.
- 6. Answer the following:
  - a) SSL provides security at IP level. State True (or) False.
  - b) \_\_\_\_\_relies on the technicalities of encryption methods unlike brute force.
- 7. Name the authentication techniques.
- 8. List the four stages in Rijndael's algorithm.
- 9. Compare and contrast SSL and IPSec.
- 10. What is a Bastion host?

#### PART - B

### Answer ALL the questions.

 $5 \times 8 = 40$ 

11. a) Explain the security mechanisms.

(or)

- b) Describe DoS attack.
- 12. a) Give explanation on terms coined to describe people causing security threat.

(or

- b) Explain configuration and technology weakness.
- 13. a) Describe vigeneré cipher with example.

(or

- b) Give an explanation on one symmetric block cipher that takes 64-bit block as input.
- 14. a) Explain Secure Hash Algorithm that produces 512-bit message digest.

(or

- b) Give a brief description on modes of operation of block cipher.
- 15. a) Elucidate IPSec Protocols.

(or)

b) Explain VPN architecture.

## PART- C

# **Answer ANY TWO questions.**

 $2 \times 20 = 40$ 

16. a) Give explanation on categories of security services.	(10)		
b) Enumerate and explain malicious codes	(10)		
17. Explain the following:			
a) Caesar Cipher	(10)		
b) MACs.	(10)		
18. a) Describe the following:			
a) Complex configurations of firewall.	(10)		
b) PKIX.	(10)		

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