



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS**

FIFTH SEMESTER – APRIL 2017

**CA 5810- NETWORK SECURITY**

Date: 29-04-2017  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART-A**

**Answer ALL the questions**

**10 x 2=20**

- 1) State the definition of security service as given in X.800.
- 2) What is OSI Security Architecture?
- 3) What is Reconnaissance attack?
- 4) Distinguish between spammer and phreaker.
- 5) Name the types of cryptanalytic attack.
- 6) Which protocol is the successor of SSL?
- 7) Answer the following:
  - a) 3DES is a stream cipher. State True/ False.
  - b) \_\_\_\_\_ is the public key cryptography used by Google's client certificates.
- 8) Mention the modes of operation of block ciphers.
- 9) What is AH and ESP?
- 10) Name the attacks on packet filter firewalls.

**PART - B**

**Answer ALL the questions**

**5 x 8=40**

- 11) a) Explain the security mechanisms.  
(or)  
b) Give explanation on model for network access security.
- 12) a) Explain classes of threats.  
(or)  
b) Give a brief description on any two access attacks.
- 13) a) Describe polyalphabetic cipher with example.  
(or)  
b) Describe IPsec architecture.
- 14) a) Explain RC4.  
(or)  
b) Elucidate Kerberos and X.509.
- 15) a) Explain types of firewalls.  
(or)  
b) Explain tunnel mode and transport mode VPN.

**PART- C**

**Answer ANY TWO questions**

**2 x 20 = 40**

16) a) Give explanation on active and passive attacks. (10)

b) Describe distributed denial of service attack (10)

17) Explain the following:

a) Play Fair Cipher (10)

b) Fiestal structure for encryption and decryption.(10)

18) Elucidate the following

a) RSA (15)

b) IPsec key management protocols.(5)

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