LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIFTH SEMESTER – **APRIL 2016**

CA 5810 - NETWORK SECURITY

Date: 29-04-2016   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

PART-A

Answer ALL the questions   **10 x 2=20**

1) Differentiate threats and attacks.

2) What is access control and encipherment?

3) Bring out the difference between attacks, threats and vulnerabilities.

4) Distinguish between white, black and grey hat.

5) What is transposition cipher? Give example.

6) Is steganography an encryption technique? Justify.

7) Expand and differentiate HMAC and CMAC.

8) Which stream cipher and security protocol has been planned to be dropped by Google over time?

9) Mention the limitations of firewall.

10) Name the parameters of security associations.

PART - B

Answer ALL the questions   **5 x 8=40**

11) a) Explain the security services.
                (or)
    b) Enumerate and explain security attacks.

12) a) Explain port redirection and trust exploitation.
                (or)
    b) Give a brief description on any two vulnerabilities.

13) a) Describe play fair cipher with example.
                (or)
    b) Describe one symmetric block cipher that takes 128-bit block as input.

14) a) Explain CBC and CTR modes.
                (or)
    b) Elucidate the architecture of PKIX.

15) a) Describe any two types of firewall.
                (or)
    b) Explain remote access VPN.

PART- C

2 x 10 = 20

16) a) Give explanation on model for network access security.   **(10)**

   b) Describe DoS attack   **(10)**

17) Explain the following:

   a) Polyalphabetic cipher.   **(10)**

   b) Distribution of public keys   **(10)**

18) a) Elucidate the following:

   a)   Types of DEA.   **(15)**

   b) AH and ESP.   **(5)**

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