11718

3 Hours / 100 Marks   Seat No.

Instructions :   (1)   All Questions are *compulsory.*

(2)   Answer each next main Question on a new page.

(3)   Illustrate your answers with neat sketches wherever necessary.

(4)   Figures to the right indicate full marks.

(5)   Assume suitable data, if necessary.

(6)   Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.   (a)   Attempt any THREE :   **12**

(i)   State the need of Computer Security.

(ii)   List types of attacks. Explain back doors and trap doors attacks.

(iii)   Compare symmetric and asymmetric key cryptography.

(iv)   Explain the terms : Cryptography, Cryptanalysis and Cryptology.

(b)   Attempt any ONE :   **6**

(i)   Describe the following attacks :

(A)   Sniffing

(B)   Spoofing

(ii)   Explain data recovery tools and data recovery procedures.

2. **Attempt any TWO of the following :** 16

   (a) Explain any four attacks on Computer System Security.

   (b) What is the importance of biometrics in Computer Security ? Describe finger prints registration and verification process.

   (c) Explain transposition technique. Convert plain text to Cipher text using Rail Fence technique "COMPUTER ENGINEERING".

3. **Attempt any FOUR :** 16

   (a) Explain the concept of Kerberos.

   (b) Describe different password selection criteria.

   (c) List types of firewall. Explain packet filter with diagrams.

   (d) Describe host based IDS with its advantages and disadvantages.

   (e) Explain the steps for hardening applications.

4. (a) **Attempt any THREE of the following :** 12

   (i) Explain simple columnar transposition technique with algorithm and example.

   (ii) Draw and explain virtual private network.

   (iii) Explain Cyber Crime.

   (iv) What is software piracy ?

   (b) **Attempt any ONE :**   **6**

      (i)   Explain DOS and DDOS with neat diagram.

      (ii)   Define virus. Explain atleast 5 types of viruses.

5.   **Attempt any TWO :**   **16**

   (a)   Explain individual user responsibilities in Computer Security.

   (b)   What is Security topology ? Describe Security zone in detail.

   (c)   Explain need for firewall and explain one of the type of firewall with diagram.

6.   **Attempt any FOUR :**   **16**

   (a)   Describe dumpster diving with its prevention mechanism.

   (b)   Explain the term stenography with example.

   (c)   Explain e-mail security techniques (protocols).

   (d)   What is intrusion detection system ? Explain host based IDS.

   (e)   What is TLS ? What are two layers of TLS ?

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