17514

16172

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)   Use of Non-programmable Electronic Pocket Calculator is permissible.

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

Marks

1.   (A)   Attempt any THREE of the following :   **12**

    (a)   Describe CIA security model.

    (b)   What is shoulder surfing ? How it can be prevented ?

    (c)   Describe symmetric and asymmetric key cryptography.

    (d)   What is a virus ? Describe various phases of virus.

(B)   Attempt any ONE of the following :   **06**

    (a)   Describe with the neat diagram model for security.

    (b)   Describe the process of formatted partition recovery.

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

    (a)   Describe the following term :

        (i)   Sniffing

        (ii)   Spoofing

        (iii)   Man-in-the middle

        (iv)   TCP/IP Hijack

(b) Describe Biometric security mechanism with suitable diagram.

(c) Describe DES Algorithm with suitable diagram.

3. **Attempt any FOUR of the following :** 16

(a) Describe DMZ with suitable diagram.

(b) State the importance of security awareness. How it can be achieved ?

(c) What is steganography ? What are its applications ?

(d) Describe IP based VLAN in detail.

(e) Describe SET participants.

4. **(A) Attempt any THREE :** 12

(a) Convert plain text into cipher text by using simple columnas technique of the following sentence :

'ALL IS WELL FOR YOUR EXAM'

(b) Describe IPsec configuration.

(c) Describe the process of cyber crime investigation.

(d) What is an application hardening ? How it can be achieved ?

(B) Attempt any ONE of the following : 6

(a) What is Risk ? How it can be analyzed ? List various assets.

(b) State the types of attacks and describe Active and Passive attack with atleast one example each.

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

   (a) What is a password ? Describe various policies for password selection.

   (b) Describe with suitable diagram Intrusion Detection System.

   (c) Describe 'Kerberos' protocol with suitable diagram.

6. **Attempt any FOUR of the following :** 16

   (a) What is piggybacking ? How it can be prevented ?

   (b) What is One Time Pad (OTP) security mechanism ?

   (c) Describe PGP with suitable diagram.

   (d) What is pornography ?

   (e) What is SSL/TLS ?

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