

17514

11819

3 Hours / 100 Marks

Seat No.

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

Marks

1. (A) Attempt any THREE :

12

- (a) Define computer security. Explain the need of computer security.
- (b) Describe piggy backing & shoulder surfing.
- (c) Consider plain text "Network security", encrypt it with help of Rail fence technique, also write the algorithm.
- (d) State any four limitations of firewall.

(B) Attempt any ONE :

6

- (a) What is Dumpster diving ? State preventative measures to avoid Dumpster diving.
- (b) How formatted partition can be recovered ?

- 2. Attempt any TWO :** **16**
- (a) Define the term virus. Describe the different phases of virus with suitable example.
 - (b) What is DES algorithm ? Explain each step in detail with help of diagram.
 - (c) Describe the components of NIDS with neat diagram. State its advantages & disadvantages.
- 3. Attempt any FOUR :** **16**
- (a) Differentiate between Virus & Worms.
 - (b) Enlist types of Biometrics. Explain any one Biometrics type in detail.
 - (c) Define the following terms :
 - (i) Cryptography
 - (ii) Cryptanalysis
 - (iii) Cryptology
 - (iv) Steganography
 - (d) Explain IPsec security with help of diagram.
 - (e) What is Secure Electronic Transaction ? Enlist and describe any four components of SET.
- 4. (A) Attempt any THREE :** **12**
- (a) Explain active attack & passive attack with suitable example.
 - (b) State any four drawbacks of Retina scan Biometrics.
 - (c) What is cyber crime ? Describe hacking & cracking related to cybercrime.
 - (d) Describe any **two** terms :
 - (i) Application patches
 - (ii) Hotfix
 - (iii) Upgrades
- (B) Attempt any ONE :** **6**
- (a) Describe Digital signature mechanism with neat diagram.
 - (b) List types of firewall. Explain packet filtering firewall with diagram.

5. Attempt any TWO :**16**

- (a) Describe the following terms :
 - (i) Intruders
 - (ii) Insiders
 - (iii) Sniffing
 - (iv) Spoofing
- (b) What is access control ? Describe following access control :
 - (i) DAC
 - (ii) MAC
 - (iii) RBAC
- (c) Explain the Kerberos with help of suitable diagram.

6. Attempt any FOUR :**16**

- (a) Explain Man-In-Middle attack with help of diagram.
 - (b) State any four advantages of Biometrics.
 - (c) What is PGP ? How PGP is used for email security ?
 - (d) Describe the following terms w.r.t. cyber laws :
 - (i) IT Act, 2000
 - (ii) IT Act, 2008
 - (e) Explain architecture of secure socket layer with help of diagram.
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