AO-124

April-2022

M.Sc. (CA & IT), Sem.-VIII

Information Security

Time : 2 Hours]   **[Max. Marks : 50**

SECTION – I

Attempt any **three** questions out of **5** :

1. (A) Answer the following Questions :
   - (1) What is Security model ? Explain Bell-la-Padula Model. **(5)**
   - (2) Explain CIA. **(2)**

   (B) Answer the following Questions :
   - (1) Explain Physical Security Guideline. **(5)**
   - (2) Explain Denial Of Service(DOS) attack. **(2)**

2. (A) Answer the following Questions :
   - (1) What is Firewall ? Explain in detail. **(5)**
   - (2) What is Authentication ? Explain one factor, two factor, three factor authentication. **(2)**

   (B) Answer the following Questions :
   - (1) What is Intrusion Detection & Prevention System ? Explain its component. **(5)**
   - (2) Explain SPYWARE. **(2)**

3. (A) Answer the following Questions :
   - (1) What is Digital certificate ? Explain in detail. **(5)**
   - (2) Explain Man in the Middle Attack. **(2)**

   (B) Answer the following Questions :
   - (1) What is Digital Signature ? Explain in detail. **(5)**
   - (2) Explain Public Key Cryptography. **(2)**

4. (A) Answer the following Questions :
   - (1) Explain Virtual Private Network. **(5)**
   - (2) Explain Biometrics. **(2)**

   (B) Answer the following Questions :
   - (1) Explain Kerberos Protocol. **(5)**
   - (2) Explain SSL handshake. **(2)**

5. (A) (i) Answer the following Questions : (any **one**) **(5)**
   - (1) What is Database security ? Explain in detail.
   - (2) What is Secure Electronic Transaction (SET) ? Explain in detail.

   (ii) Explain Trojan horse. **(2)**

(B) (i) Answer the following Questions : (any **one**) **(5)**
      (1) Explain Public Key Infrastructure (PKI).
      (2) Explain Network Security Model.
  (ii) Explain Virus. **(2)**

SECTION – II

6. Attempt any **eight**. **(8)**
1. Packet Filter Firewall is working on _____ and _____ Layer.
   - (A) Physical layer, Transport layer
   - (B) Transport layer, Network layer
   - (C) Network layer, Physical layer
   - (D) Application Layer. Transport Layer

2. Firewalls is to protect against_____.
   - (A) Virus Attacks
   - (B) Fire Attacks
   - (C) Data Driven Attacks
   - (D) Unauthorized Attacks

3. Digital Signature is not used for _____.
   - (A) Integrity
   - (B) Non-Repudiation
   - (C) Sender Authentication
   - (D) Encryption

4. Which of following is not included in Digital Certificate ?
   - (A) Issuer name
   - (B) Owner name
   - (C) Owner Public Key
   - (D) Owner Private Key

5. An eavesdropping attack is type of _____.
   - (A) Active Attack
   - (B) Passive Attack
   - (C) Moderate Attack
   - (D) None

6. _____ Cyber-attack attackers encrypt victim's data & lock it.
   - (A) Phishing
   - (B) Man in the Middle
   - (C) Ransom ware
   - (D) XS

7. _____ and _____ are types of IDPS.
   - (A) Client ,Server
   - (B) Host base, Network Base
   - (C) Host Base, Server Base
   - (D) Network Base, Server Base

8. Hash Algorithm is _____.
   - (A) Non-Reversible
   - (B) Encryption
   - (C) Not Secure
   - (D) Private

9. Once unwelcome packet are identify by Intrusion Prevention System(IPS) then by Intrusion Prevention System(IPS) would put them either _____ and _____.
   - (A) Quarantine, Drop
   - (B) Quarantine, Store
   - (C) Drop, Quarantine
   - (D) None of Above

10. Digital certificate is verified using _____.
    - (A) Digital Signature of Owner
    - (B) Digital Signature of Issuer
    - (C) Digital Signature of client
    - (D) None

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