Q. P. Code: 27223

Duration: 03hrs   Marks:80

Note: 1) Question 1 is compulsory.

2) Solve any 3 questions from remaining questions.

1. a) What is Distributed Denial of Service (Dos) Attack?   (5)

    b) Explain Biometric authentication.   (5)

    c) Consider an online election system identify vulnerability, threat and attack.   (5)

    d) Explain SQL Injection with an example.   (5)

2. a) Explain the roles of the different Servers in Kerberos Protocol. How does the user get

       authenticated to the different servers?   (10)

    b) Explain different types of firewalls that can be used to secure a network with advantages

       and disadvantages.   (10)

3. a) What is Digital Signature? Explain how it is created by sender and verified by receiver.   (10)

    b) What is the need of Intrusion Detection System (IDS)? Explain different types of IDS with

       advantages and disadvantages.   (10)

4. a) What are the different approaches to Software Reverse Engineering?   (10)

    b) Explain secure Email protocols and S/MIME.   (10)

5. a) List & explain types of Non-Malicious Codes : Buffer Overflow, Incomplete Mediation

       & Race Conditions.   (10)

    b) Explain the TCP/IP Vulnerabilities i.e. layer wise well known attacks.   (10)

6. Write short notes on **(any four)**   (20)
    a) Cross Site Scripting.
    b) Digital Rights Management.
    c) Windows vulnerabilities.
    d) CIA Security goals
    e) Federated Identity Management

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