T.E. SEM VI / IT/ CBGS / MAY 2017

Q.P. Code: 18254

Duration: 03 hrs   Marks:80

Note: 1) Question 1 is compulsory.

2) Solve any 3 questions from remaining questions.

1. a) Consider an Online Shopping Site identify vulnerability, threat and attack.   (5)

   b) Explain CIA security goals.   (5)

   c) Describe TCP Syn Flood attack.   (5)

   d) What are types of Malicious codes?   (5)

2. a) Explain the types of Non-Malicious Codes – Buffer Overflow, Incomplete Mediation
   & Race Conditions with an example.   (10)

   b) Explain Transport mode and Tunnel mode of IPSec and mention under which scenarios
   both modes can be used.   (10)

3. a) What is Denial of Service attack? List and explain different techniques to perform
   DOS attack. Explain defence mechanism against DOS.   (10)

   b) How the single sign on is achieved in Kerberos protocol? What is the concept of ticket
   in this protocol?   (10)

4. a) Explain the need of Intrusion Detection System (IDS)? Differentiate between signature
   based and anomaly based IDS. State advantages and disadvantages of each.   (10)

   b) What is Token Based Authentication? Explain its types.   (10)

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

   b) Explain steps of RSA algorithm with an example and list real time applications where
   RSA can be used.   (10)

6. Write short notes on: (any four)   (20)

   a) Federated Identity Management

   b) Covert Channel

   b) SQL Injection attack with example

   d) Biometric authentication

   e) Honey pots

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