

**Punyashlok Ahilyadevi Holkar Solapur University, Solapur**

**B.Sc(ECS)- III (Semester – VI) Examination**

**Computer Science (New w.e.f. Nov 2021) New CBCS**

**System Security (paper– XIV)**

**Question Bank**

**80 marks**

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**Question For 2 Marks**

- 1) Define computer security
- 2) What is a digital signature?
- 3) What is a public-key certificate?
- 4) What are four means of authenticating a user's identity?
- 5) Define the three classes of subject in an access control system?
- 6) Define the terms database management system and query language?
- 7) What is a "logic bomb"?
- 8) What are typical phases of operation of a virus or worm?
- 9) Define a distributed denial-of-service (DDoS) attack.
- 10) Define a reflection attack.
- 11) What is System Security?
- 12) What is mean by Access Control Principles
- 13) What is a message authentication code?
- 14) What are two common techniques used to protect a password file?
- 15) What is an access right?
- 16) What is a protection domain?
- 17) What is Database Security?
- 18) What is mean by Attacks?
- 19) Define the term Viruses?
- 20) Define the term Spyware
- 21) What is mean by Phishing?
- 23) Define Flooding Attacks
- 24) Define Cloud Security
- 25) What is mean by Database Access Control?
- 26) Define Inference
- 27) Define Statistical Databases
- 28) Define Database Encryption
- 29) Define Subjects and Objects
- 30) What is mean by Access Rights?
- 31) What is mean by Discretionary Access Control?
- 32) What is mean by Application-Based Bandwidth Attacks?
- 33) What is mean by Reflector Attacks?
- 35) Define Amplifier Attacks?

- 36) How Can i Avoid Spyware?
- 37) What Is Authenticode?
- 38) Explain About User Security?
- 39) Define Rootkits.
- 40) Define Viruses.

**Question for 3 marks**

- 1) Explain Database Encryption?
- 2) Explain Flooding Attacks?
- 3) Explain Public-Key Encryption?
- 4) Explain Denial-of-Service Attacks?
- 5) Explain Countermeasures?
- 6) Explain Propagation?
- 7) Explain Trojans?
- 8) Explain Payload–System Corruption?
- 9) Explain Payload–Attack Agent–Zombie?
- 10) Explain Bots?
- 11) Payload– Information?
- 12) Theft– Keyloggers?
- 13) Explain Flooding Attacks
- 14) Explain Distributed Denial-of-Service Attacks
- 15) Explain Responding to a Denial-of-Service Attack

**Question For 4 Marks**

- 1) What are two common techniques used to protect a password file?
- 2) Explain the Means of Authentication?
- 3) What is a relational database and what are its principal ingredients?
- 4) In the context of access control, explain a subject and an object?
- 5) List and explain four common techniques for selecting or assigning passwords?
- 6) Explain the difference between a simple memory card and a smart card.
- 7) Explain Role - Based Access Control in access control?
- 8) Explain The Need for Database Security?
- 9) Explain Social Engineering–SPAM E-mail?
- 10) Explain Flooding Attacks with types of Flooding Attacks
- 12) Explain Database Access Control in database Security

**Question For 5 Marks**

- 1) Explain Message Authentication and Hash Functions in detail?
- 2) Define the User Authentication? Explain Electronic Identity Cards and smart card in Token-Based Authentication?

- 3) Explain Access Control Context and Access Control Policies in Access Control Principles?
- 4) What is Confidentiality? Explain Confidentiality with Symmetric Encryption?
- 5) What is Authentication? Explain Password-Based Authentication?
- 6) Explain the Need for Database Security?
- 7) Explain Defenses Against Denial-of-Service Attacks,\
- 8) Explain Propagation–Vulnerability Exploit–Worms
- 9) Explain UNIX File Access Control
- 10) Explain Propagation– Infected Content–Viruses
- 11) Explain Payload–Stealth–Backdoors?
- 12) Explain Cloud Security in database security

### **Question For 8 Marks**

- 1) What is biometric authentication? Explain Physical Characteristics Used in Biometric Applications and Operation of a Biometric Authentication System.
- 2) What is Malicious Software? Explain Types of Malicious Software?
- 3) Explain Denial-of-Service Attacks in detail?
- 4) What is Confidentiality? Explain Confidentiality with Symmetric Encryption?
- 5) Explain DBMS Architecture with suitable diagram.
- 6) Explain Reflector and Amplifier Attacks in details.
- 7) Explain Relational Databases with example in database Security
- 8) Explain Case Study: RBAC System for a Bank in Access Control
- 9) Explain Distributed Denial-of-Service Attacks in detail
- 10) Explain Database Access Control in database security in detail?
- 11) Define Password Explain Password-Based Authentication
- 12) What is Authentication protocol? Explain Electronic Identity Cards with digram?