

Register Number.....

**B.TECH. DEGREE EXAMINATIONS: APRIL/MAY 2012**

Eighth Semester

**INFORMATION TECHNOLOGY**

U07CSE13: Information Security

**Time: Three Hours**

**Maximum Marks: 100**

**Answer All Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. \_\_\_\_\_ is a technique used to gain unauthorized access whereby the intruder sends messages to a computer with an IP address indicating that the message is coming from a trusted host  
A. Spoofing            B. Man-in-the-middle            C. Spam            D. Mail Bombing
2. \_\_\_\_\_ is an attack in which a coordinated stream of requests is launched against a target from many locations at the same time.  
A. DoS            B. DDoS            C. Back Doors            D. Hoaxes
3. Cost Benefit Analysis is \_\_\_\_\_  
A.  $ALE(\text{prior}) - ALE(\text{post}) - ACS$             B.  $ALE(\text{prior}) - ALE(\text{post}) + ACS$   
C.  $ALE(\text{prior}) - ALE(\text{post})$             D.  $ALE(\text{post}) - ALE(\text{prior})$
4. \_\_\_\_\_ control give users and data owners limited control over access to information resources.  
A. DCL            B. MAC            C. Non discretionary            D. role-based
5. Hackers often gain entry to a network by pretending to be at a legitimate computer is  
A. IP Spoofing            B. ID theft            C. forging            D. Spoofing
6. A \_\_\_\_\_ is anything that can cause harm  
A. Phish            B. Spoof            C. Vulnerability            D. Threat
7. The point at which an organization's security protection ends and the outside world begins is referred to as  
A. Sphere of protection            B. Defense in Depth            C. Security perimeter            D. Protection
8. \_\_\_\_\_ allow configuration to restrict access from anyone and anywhere.  
A. ACL            B. SPP            C. ISSP            D. General security policy

9. \_\_\_\_\_ is the process of obtaining the original message from an encrypted message without knowing the algorithms and keys used to perform the encryption.

- A. Vulnerability Scanners      B. Crpytography      C. Cryptoanalysis      D. Packet Sniffers

10. Digital Signature is

- A. Scanned Signature on Computer      B. Code number of the sender  
C. Public Key Encryption      D. Software to recognize signature

**PART B (10 x 2 = 20 Marks)**

11. What is the difference between Vulnerability and exposure?  
12. What are the information security roles to be played by various professional in a typical organization?  
13. What is a deliberate act of sabotage and vandalism?  
14. What are the fundamentals principles of HIPAA?  
15. What are the different types of Access Controls?  
16. Define the process of Information asset valuation.  
17. What is Information Security Blueprint?  
18. List the management controls of NIST SP 800-26.  
19. What are Honey Pots?  
20. Define Packet Sniffers.

**PART C (5 x 14 = 70 Marks)**

21. a) Explain different phases of SDLC and Security SDLC

**(OR)**

- b) (i) What is information security ? Explain the various components of Information System. (7)  
(ii) What are the critical characteristics of Information? (7)

22. a) Enumerate major types of attacks on computer based systems.

**(OR)**

- b) What is the code of ethics to be adhered to by the information security personnel stipulated by different professional organizations?

23. a) Explain in detail different risk control strategies.

**(OR)**

b) What is risk management? Why is the identification of risks by listing assets and vulnerabilities is so important in the risk management process?

24. a) What are the three types of security policies? Explain.

**(OR)**

b) (i) Explain NIST SP 800-14. (7)

(ii) Write short notes on Incident Response Plan(IRP) and Disaster Recovery Plan (7)

25. a) How the credentials of Information Security Personnels are assessed? What are the certifications the Information Security Personnels should aquire for fitting into their roles?

**(OR)**

b) What are different types of Intrusion Detection Systems available? Explain with diagrams.

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