

00562

**P.G. DIPLOMA IN INFORMATION SECURITY  
(PGDIS)**

**Term-End Examination**

**December, 2018**

**MSEI-025 : APPLICATION AND BUSINESS  
SECURITY DEVELOPMENTS**

*Time : 2 hours*

*Maximum Marks : 50*

- Note :**
- (i) *Section A - Objective type questions.*
  - (ii) *Section B - Very short answer type questions.*
  - (iii) *Section C - Short answer type questions (Attempt any 2 out of 3 questions).*
  - (iv) *Section D - Long answer type questions (Attempt any 2 out of 3 questions).*

**SECTION - A**

(Attempt all the questions)

**10x1=10**

1. System analysis and design phase of Software Development Life Cycle (SDLC) includes which of the following ?
  - (a) Parallel run
  - (b) Sizing
  - (c) Specification Freeze
  - (d) All
  
2. Risk analysis of a project is done in :
  - (a) System analysis phase
  - (b) Feasibility study
  - (c) Implementation phase
  - (d) Maintenance phase

3. Which of the following does not occur in phase-4 of the System Development Life Cycle (SDLC).
- (a) Conduct interviews
  - (b) Train users
  - (c) Acquire hardware and software
  - (d) Test the new system
4. In SET protocol a customer sends a purchase order :
- (a) Encrypted with his public key
  - (b) In plaintext form
  - (c) Encrypted using Bank's Public key
  - (d) Using digital Signature System
5. The \_\_\_\_\_ is code embedded in some legitimate program that is set to "explode" when certain conditions are met.
- (a) Trap doors
  - (b) Trojan Horse
  - (c) Logic Bomb
  - (d) Virus
6. What can you trust to be secure 100 percent of the time ?
- (a) Text messages
  - (b) Emails
  - (c) Logic bomb
  - (d) Virus
7. What is the main purpose of access control ?
- (a) To authorize full access to authorized users
  - (b) To limit the actions or operations that a legitimate user can perform
  - (c) To stop unauthorized users accessing resources
  - (d) To protect computers from viral infections

8. Which of the following does not use a Cryptographical Technique to protect data ?
- (a) The use of digital signatures
  - (b) Data encryption
  - (c) The use of stored encrypted password files
  - (d) Using asymmetric keys at sender and receiver nodes
9. What is the default port number for apache and most web servers ?
- (a) 20
  - (b) 40
  - (c) 80
  - (d) 120
10. Which of the following is true of improper error handling ?
- (a) Attackers can use error messages to extract specific information from a system.
  - (b) Attackers can use unexpected errors to knock an application offline, creating DOS attack.
  - (c) Unexpected errors can provide an attacker with a buffer or stack overflow condition that sets the stage for an arbitrary code execution.
  - (d) All of the above

**SECTION - B**  
(Attempt all the questions)

**5x2=10**

- 11. Define web application scanning.
- 12. Describe buffer overflow attack.
- 13. Describe SQL Injection attack.
- 14. What are Information system threats ?
- 15. Write the basic principles of Information security.

### SECTION - C

(Attempt any 2 out of 3 questions) 2x5=10

16. What is the difference between a network vulnerability assessment and a penetration test ?
17. Describe passive and active attacks with example.
18. Explain symmetric and asymmetric cryptography with example.

### SECTION - D

(Attempt any 2 out of 3 questions) 2x10=20

19. Explain authentication, authorization and session management with example.
  20. Explain Error Handling and Logging with example.
  21. Write short notes on the following : 5x2=10
    - (a) 3D Security
    - (b) DOS and DDOS attack
    - (c) Digital signature
    - (d) PKI
    - (e) X SS attack
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