P. G. DIPLOMA IN INFORMATION SECURITY (PGDIS)

Term-End Examination December, 2022 MSEI-025: APPLICATION AND BUSINESS SECURITY DEVELOPMENTS

Time: 2 Hours Maximum Marks: 50

- **Note**: (i) Section A: Answer all the objective type questions.
 - (ii) **Section B**: Answer all the very short answer type questions.
 - (iii) **Section C**: Answer any **two** out of three short answer type questions.
 - (iv) Section D: Answer any two questions out of three long answer type questions.

Section—A

Note: Answer all the objective type questions.

 $10 \times 1 = 10$

- 1. Which practice help secure the configuration utilities on wireless access points from unauthorized access?
 - (a) Assigning a private IP address to the AP

[2] MSEI-025

- (b) Configuring a new administrator password
- (c) Configuring traffic filtering
- (d) None of the above
- 2. TLS stands for
- 3. Which answer is not true for Diffie-Hellman algorithm?
 - (a) Security stems from the difficulty of calculating the product of two large prime numbers.
 - (b) It was the first public key exchange algorithm.
 - (c) It is vulnerable to man-in-the-middle attacks.
 - (d) None of the above
- 4. In what way does the RSA algorithm differ from the Data Encryption Standard (DES)?
 - (a) It cannot produce a digital signature.
 - (b) It terminates the need for a key distribution center.
 - (c) It is based on a symmetric algorithm.
 - (d) It uses a public key for encryption.
- 5. In which step of SDLC project termination could be done?
 - (a) Design phase
 - (b) System maintenance phase
 - (c) Feasibility study phase
 - (d) Coding phase

- 6. Which testing enables the tester to evaluate the software behaviour when exceptions occur?
 - (a) Fault injection testing
 - (b) Fuzz testing
 - (c) Active testing
 - (d) Passive testing
- 7. Which of the following blocks are used for error handling in SQL server?
 - (a) Try.....Catch
 - (b) Try.....Final
 - (c) Try.....End
 - (d) Catch.....Try
- 8. Which of the following statements can be checked for errors?
 - (a) CREATE
 - (b) DROP
 - (c) DELETE
 - (d) INSERT
- 9. What is the ethics behind training how to hack a system?
 - (a) To think like hackers and know how to defend such attacks.
 - (b) To hack a system without the permission.
 - (c) To hack a network that is vulnerable.
 - (d) To corrupt software or service using Malware.

[4] MSEI-025

- 10. has now evolved to be one of the most popular automated tools for unethical hacking.
 - (a) Automated Apps
 - (b) Database Software
 - (c) Malware
 - (d) Worms

Section—B

Note: Answer all the very short answer type questions. $5\times2=10$

- 11. What is Cyber Security?
- 12. What are forces driving the need for application security?
- 13. Discuss service delivery model.
- 14. Give an example of STRUTS input validation.
- 15. How spyware are dangerous threat than viruses?

Section—C

Note: Answer any two questions out of three short answer type questions. $2\times5=10$

- 16. List down the factors that can cause vulnerabilities.
- 17. List down any *five* main types of security testing as per open source security testing methodology manual.
- 18. What is SOAP and WSDL?

Section-D

Note: Answer any two questions out of three long answer type questions. $2 \times 10 = 20$

- 19. Write short notes on the following:
 - (a) V model of software testing
 - (b) Pass-fail criteria
 - (c) Cross-site scripting
 - (d) SQL injection
 - (e) Canonicalization
- 20. How many parties are broadly involved in authentication? Explain the role of each party.
- 21. What is the difference between a threat, vulnerability and a risk? Explain the advantages of implementing the policies related to information security?