ADVANCED CERTIFICATE IN INFORMATION SECURITY

(A. C. I. S. E.)

Term-End Examination June, 2022

OSEI-044: SERVER SECURITY

Time: 2 Hours Maximum Marks: 50

Note: Section A: Answer all the Objective type questions.

Section B: Answer all the Very short answer type questions.

Section C: Answer any two out of three Short answer type questions.

Section D: Answer any two out of three Long answer type questions.

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Section—A

Note: Attempt all the objective type questions.

 $10 \times 1 = 10$

- 1. In which of the following exploits does an attacker insert malicious code into a link that appears to be from a trustworthy source?
 - (a) XSS
 - (b) Command injection
 - (c) Path traversal attack
 - (d) Buffer overflow
- 2. Which of the following is considered as the unsolicited commercial e-mail?
 - (a) Virus
 - (b) Malware
 - (c) Spam
 - (d) All of the above
- 3. Which of the following refers to stealing one's idea or invention of others and use it for their own benefits?
 - (a) Piracy
 - (b) Plagiarism
 - (c) IPR
 - (d) All of the above

- 4. Which of the following refers to the violation of the principle if a computer is no more accessible?
 - (a) Access control
 - (b) Confidentiality
 - (c) Availability
 - (d) All of the above
- 5. Which one of the following refers to the technique used for verifying the integrity of the message?
 - (a) Digital signature
 - (b) Decryption algorithm
 - (c) Protocol
 - (d) Message digest
- 6. Which of the following can be considered as the elements of cyber security?
 - (a) Application security
 - (b) Operational security
 - (c) Network security
 - (d) All of the above

7.	The term CHAP stands for				
	(a)	Challenge	Handshake	Authentication	
		Protocols			
	(b)	Circuit	Handshake	Authentication	
		Protocols			
	(c)	Challenge Protocols	Hardware	Authentication	
	(d)	None of the above			
8.	IIS stands for				
	(a)	Interconnected Information Server			
	(b)	Internet Information Services			
	(c)	Internet Information Server			
	(d)	None of the above			
9.	tool clears the log entries in the IIS				
	log files filtered by an IP address.				
	(a)	Clean IIS logging			
	(b)	Clean logger			
	(c)	Clean IIS log			
	(d)	None of the above			

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- 10. What is the sequence of a TCP connection?
 - (a) SYN-ACK-FIN
 - (b) SYN, SYN-ACK, ACK
 - (c) SYN-ACK
 - (d) None of the above

Section—B

Note: Attempt all the very short answer type questions. $5 \times 2 = 10$

- 11. Compare e-mail forgery and e-mail spanning.
- 12. Differentiate between cracking and hacking.
- 13. Briefly discuss the term vector, in context of cyber security.
- 14. What is a social engineering attack? Give an example.
- 15. How does stream cipher differ from block cipher?

Section—C

- **Note**: Attempt any **two** out of three short answer type questions. $2 \times 5 = 10$
- 16. What is eaves dropping? Explain active and passive attacks with examples.

- 17. How to identify whether windows has been hacked? List the various identification markers (at least *five*).
- 18. Discuss Pretty Good Privacy (PGP) in detail.

Section—D

- **Note**: Attempt any **two** out of three long answer type questions. $2 \times 10 = 20$
- 19. What are PIN-Based systems? Discuss the common issues with PIN-Based systems.
- 20. What are digital signatures? Discuss the working of digital signature with suitable diagram.
- 21. What is the difference between physical data security and software-based data security? Give suitable example for each.