Reg. No. :

Question Paper Code: 49214

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Elective

Computer Science and Engineering

14UCS914 - CYBER FORENSICS

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. The Is a collection of protocols designed by Internet

Engineering Task Force(IETF) to provide security for a packet at the Network level.:

(a) IPsec	(b) Netsec
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- (c) Packetsec (d) Protocolsec
- 2. State the purpose of alert message:
 - (a) Identify input labels (b) Key generation
 - (c) Connection termination (d) Information exchange
- 3. PGP offers _____ block ciphers for message encryption.

(a) Triple-DES (b) CAST (c) IDEA (d) All of the mentioned

4. State which of the following is the attribute certificate with respect to PKIX:

(a) X.509 AC (b) X.502 AC (c) X.508 AC (d) X.507 AC

- 5. To be considered a computer crime, what needs to be involved in the crime?
 - (a) Technology (b) Computers
 - (c) Data (d) Networks
- 6. Identify the password recovery methods
 - (a) Rainbow Attack(b) Script kiddies(c) Cyberpunks(d) Hackers

7. State which of these is an open source encryption encryption tool:

	(a) DPMI	(b) Cross crypt	(c) EFS	(d) ZBR		
8.	8. Encrypting File Systems are used to encrypt					
	(a) Files	(b) Folders	(c) Disk volumes	(d) All of the above		
9. State the use of bit shifting						
	(a) Hiding data	(b) Digital Watermarking				
	(c) Track Network		(d) Examining Tool			
10. What is the use of DiD?						
	(a) Data registry		(b) Traffic Monitoring			
	(c) File processing		(d) None of the	e above		
PART - B (5 x $2 = 10$ Marks)						

- 11. Mention the two main transformation types that form the basis of IPsec.
- 12. List the algorithms used in PGP 5.X
- 13. Who can use Computer Forensic Evidence?
- 14. Define Recovery Certificate.

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15. What is meant by Data Hiding?

PART - C ($5 \times 16 = 80$ Marks)

16. (a) Explain in detail about SSL Handshaking Protocol between a Server and Client Connection with an appropriate diagram. (16)

Or

- (b) Discuss about Key Management Protocol for IPSec. (16)
- 17. (a) Explain in detail about PGP Packet Header and Packet Structure with suitable examples. (16)

Or

- (b) Demonstrate the SET system Participants with a diagram. (16)
- 18. (a) Describe in detail about Forensic Duplication and Investigation (16)

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(1) Examine in detail the roles of the following in detail:-					
	(i) Forensics Technology.	(8)				
	(ii) Forensics Systems.	(8)				
19. (a) Describe about the following mechanisms:					
	(i) Understanding File Systems.	(6)				
	(ii) Whole Disk Encryption.	(10)				
	Or					
(b) Explain in detail about the following:-					
	(i) Computer Forensics Software Tools.	(8)				
	(ii) Computer Forensics Hardware Tools.	(8)				
20. (a) Examine in detail the techniques used for Addressing Data Hiding.	(16)				
Or						
(b) Give a brief description of the following data-hiding techniques:	(16)				
	(i) Hiding Partitions					

(ii) Bit-Shifting

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