

(Please write your Exam Roll No.)

Exam Roll No.

END TERM EXAMINATION

THIRD SEMESTER [BCA] JANUARY-FEBRUARY 2023

Paper Code: BCAT-213

Subject: Cyber Security

Time: 3 Hours

Maximum Marks: 75

Note: Attempt five questions in all including Q.No.1 which is compulsory. Select one question from each unit.

- Q1. Write short notes on the following (**Any Five**): (5x5=25)
- (a) Explain the concept of Data Security Council of India.
 - (b) Define main techniques hackers can use to get hold on your password.
 - (c) Define Digital Signature algorithm.
 - (d) Write down the steps involved in computer forensic investigation.
 - (e) Explain the differences between Virus, Worms, and Trojan horse.
 - (f) Compare between Symmetric key encryption and Asymmetric key encryption.
 - (g) What are the categories of Computer Society?
 - (h) Explain the concept of IPC 1980.

UNIT-I

- Q2. (a) What is Cybercrime? How it is classified? What are the different types of cybercrimes towards an individual? (6.5)
- (b) Explain various criminal attacks in detail? (6)
- Q3. (a) What is the data security consideration? Explain in this reference Data Backup security, Data archival security and Data disposal consideration. (6.5)
- (b) Elaborate the concept of cyberstalking in detail. (6)

UNIT-II

- Q4. (a) Define DoS and DDoS Attacks in brief. What are the techniques behind such attacks? (6.5)
- (b) Explain the term Hacking. What are the various classifications of hackers? (6)
- Q5. (a) What is password cracking? List four guidelines that need to be followed to avoid password cracking. (6.5)
- (b) Explain the term Phishing. Write down various methods or activities which constitute phishing. (6)

UNIT-III

- Q6. (a) Explain the architecture of firewall. What are the various characteristics of firewall? (6.5)
- (b) Explain the S-MIME protocol for secure E-Mail. (6)

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- Q7. (a) Explain the concept of cryptography by using the diagrammatical approach of it? Define the transformation method of it. **(6.5)**
(b) Explain the following terms: **(6)**
(a) Bit-stream image
(b) Chain of custody
(c) Evidence custody form

UNIT-IV

- Q8. (a) Explain Software piracy. Write down various activities that constitute software piracy. **(6.5)**
(b) What are the requirements to set up a workstation for computer forensics? **(6)**
- Q9. (a) What are the different acquisition tools in forensics? Explain. **(6.5)**
(b) Explain the legal process to conduct computer investigation for potential criminal violations of law. **(6)**

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