

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA/B.Sc.(IT)/IMCA(AY_IV) Summer 2022-23 Examination

Semester: 4

Date: 21/03/2023

Subject Code: 05101267/05302251/05102251

Time: 10.30am to 1.00pm

Subject Name: Cyber Security & Forensics - I

Total Marks: 60

Instructions:

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Do as a direct: **[10]**

(a) Answer the following in short: **[05]**

1. What is Authorization
2. Write a full form of SOAP.
3. Which is Data Breach?
4. What is Cryptography?
5. Write any one difference between DoS and DDoS.

(b) Select the correct answer of the question from the following given options/ True or Fales. **[10]**

1. Which of the following is not a cybercrime?
A. Denial of Service B. Malwaree C. Man in the middle D. AES
2. _____ is a type of software designed to help the user's computer detect viruses and avoid them.
A. Antivirus B. Adware C. Malware D. Both B and C
3. What are the features of cyber security?
A. Compliance B. Defense against internal threats
C. Threat Prevention D. All of the above
4. Which of the following refers to stealing one's idea or invention of others and use it for their own benefits?
A. Piracy
B. Plagrisam
C. Intellectual Property Rights
D. All of the above
5. What is true about VPN in Network security methods?
A. A tool that authenticates the communication between a device and a secure network
B. VPN creating a secure, encrypted "tunnel" across the open internet.
C. VPN typically based on IPsec or SSL.
D. All of the above
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. Which of the following are the types of scanning?
A. Network, vulnerability, and port scanning B. Port, network, and services
C. Client, Server, and network D. None of the above

8. Which one of the following is also referred to as malicious software?
 A. Maliciousware B. Badware C. Illegalware D. Malware
9. Which of the following are famous and common cyber-attacks used by hackers to infiltrate the user's system?
 A. DDos and Derive-by Downloads
 B. Malware & Malvertising
 C. Phishing and Password attacks
 D. All of the above
10. _____ is used to hide information inside a picture.
 A. Steganography B. Hiding C. Integrate D. None of the above

Q.2 Answer the following questions: (Any Five)

[15]

1. Explain CIA Model.
2. What is steganography? Write your answer with example.
3. What is Symmetric cryptography and asymmetric cryptography
4. Explain three any advantages of Cyber Security.
5. Write a short note on: Virtual Private Network.
6. Explain System Security in detail.

Q.3 Answer the following questions: (Any three)

[15]

1. List tools of Cyber Security. Explain any two tools with its features.
2. Write a note on – Digital Signature
3. Explain any three authentication mechanisms/ patterns in details.
4. Explain hashing functions/algorithms in detail.

Q.4 Answer the following question in detail:

- (a) Elaborate Applications of Biomatrices in Cyber Security. **[05]**
- B.(1)** Explain Identity and Access Management in Cyber Security. **[05]**
- B.(2)** List any five attacks of cyber security. Explain any two in detail. **[05]**

OR

- B.(1)** Explain Intrusion Prevention System and Intrusion Detection System. **[05]**
- B.(2)** What is Malware? Explain any three types of Malwares in detail. **[05]**