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**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**

(An Autonomous Institute Affiliated to AKTU, Lucknow)

**MCA**

**SEM: II - THEORY EXAMINATION (2022-2023 )**

**Subject: Cyber Security**

**Time: 2 Hours**

**Max. Marks: 50**

**General Instructions:**

**IMP:** Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of **three Sections -A, B, & C**. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.
2. Maximum marks for each question are indicated on right -hand side of each question.
3. Illustrate your answers with neat sketches wherever necessary.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.
6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

**SECTION A**

**15**

**1. Attempt all parts:-**

- |      |  |   |
|------|--|---|
| 1-a. | Mark the features of cyber security. (CO1) | 1 |
|      | (a) Compliance                             |   |
|      | (b) Defense against internal threats       |   |
|      | (c) External threat Prevention             |   |
|      | (d) All of the above                       |   |
| 1-b. | Electronic cash is (CO2)                   | 1 |
|      | (a) Cash in digital form                   |   |
|      | (b) Cash in document form                  |   |
|      | (c) Both of above                          |   |
|      | (d) None                                   |   |
| 1-c. | Hard disk is a type of? (CO3)              | 1 |
|      | (a) Teritary storage                       |   |
|      | (b) On line storage                        |   |
|      | (c) Primary storage                        |   |

- (d) Secondary storage
- 1-d. \_\_\_\_\_ is a process of changing plaintext into ciphertext. (CO4) 1
- (a) Cryptography
- (b) Encryption
- (c) Decryption
- (d) Cryptanalysis
- 1-e. Which of the following is excluded from the intellectual property law? (CO5) 1
- (a) Income Tax Act, 1962
- (b) Trademark Act, 1999
- (c) Patent Act, 1970
- (d) Copyright Act, 1957

**2. Attempt all parts:-**

- 2.a. Differentiate between Data and Information, support your answer with the help of example. (CO1) 2
- 2.b. Explain the term Spyware. (CO2) 2
- 2.c. Give a brief explanation about application security. (CO3) 2
- 2.d. Define the term Cryptography. (CO4) 2
- 2.e. What do you understand by Email security policy? (CO5) 2

**SECTION B**

**15**

**3. Answer any three of the following:-**

- 3-a. Explain the CIA Triad with proper diagram and example. (CO1) 5
- 3-b. Differentiate between Virus and Worm. (CO2) 5
- 3-c. There are many security issues that are faced by data storage devices? Discuss in detail. (CO3) 5
- 3-d. Explain the types of Cryptography technique with proper diagram and example. (CO4) 5
- 3.e. With the help of a diagram, show how email security works. (CO5) 5

**SECTION C**

**20**

**4. Answer any one of the following:-**

- 4-a. Discuss guidelines for safe social media access. (CO1) 4
- 4-b. Explain security risk analysis along with its types. (CO1) 4

**5. Answer any one of the following:-**

- 5-a. Explain data security technologies in detail. (CO2) 4
- 5-b. In electronic payment system, what types of frauds can occur? Explain in detail. (CO2) 4

**6. Answer any one of the following:-**

- 6-a. Discuss the steps involved in developing a secure Information System ? (CO3) 4
- 6-b. With the help of example differentiate between Application and System security? (CO3) 4

**7. Answer any one of the following:-**

- 7-a. Write short note on: A) Public Key Encryption B) Private Key Encryption. (CO4) 4
- 7-b. Define Digital Signature. Discuss the various security services provided it. (CO4) 4

**8. Answer any one of the following:-**

- 8-a. Why an organization should have an email security policy? (CO5) 4
- 8-b. Explain the following: A) WWW security policies B) Social media security. (CO5) 4

2022-23 Jan\_Jun