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NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

B.Tech

SEM: III - THEORY EXAMINATION - (2023- 2024)

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. | Identify a malware (CO1) | 1 |
| | (a) Antivirus | |
| | (b) spyware | |
| | (c) firewall | |
| | (d) VPN | |
| 1-b. | Recognize the cheapest form of Authentication. (CO2) | 1 |
| | (a) Password based Authentication | |
| | (b) Encryption | |
| | (c) Biometric based Authentication | |
| | (d) Smart cards | |
| 1-c. | Which type of Storage device is a hard disk? (CO3) | 1 |
| | (a) Tertiary | |
| | (b) Off-line | |
| | (c) Primary | |

- (d) Secondary
- 1-d. Data Encryption Standard (DES) designed by [CO4] 1
- (a) Intel
- (b) Sony
- (c) IBM
- (d) HP
- 1-e. India's first cybercrime police station- [CO5] 1
- (a) Bangalore
- (b) Delhi
- (c) Calcutta
- (d) Mumbai

2. Attempt all parts:-

- 2.a. Define Information system. CO1 2
- 2.b. Explain social engineering attack. (CO2) 2
- 2.c. State the difference between the concept of layering and abstraction. (CO3) 2
- 2.d. Define Network. [CO4] 2
- 2.e. Define IPR. [CO5] 2

SECTION B

15

3. Answer any three of the following:-

- 3-a. Discuss various approaches followed in development of Information system. CO1 5
- 3-b. Enlist advantages and disadvantages of E-commerce. (CO2) 5
- 3-c. Elaborate the term access control in context with cyber security. (CO3) 5
- 3-d. Discuss DES with help of an example. [CO4] 5
- 3.e. Explain Cloud deployment models. Explain in detail. [CO5] 5

SECTION C

20

4. Answer any one of the following:-

- 4-a. Discuss active attacks in network with example. CO1 4
- 4-b. Describe some important guidelines to generate a secure password. (CO1) 4

5. Answer any one of the following:-

- 5-a. Explain packet filtering firewall. (CO2) 4
- 5-b. Difference between Rule based access control and MAC. (CO2) 4

6. Answer any one of the following:-

- 6-a. Explain Application Development Security with guidelines. (CO3) 4
- 6-b. Intrusion detection system and closed circuit televisions plays an important role in providing physical security to our information system how ? (CO3) 4

7. Answer any one of the following:-

- 7-a. Give the application of IP security. [CO4] 4
- 7-b. What is the difference between a private key and a public key? (CO4) 4

8. Answer any one of the following:-

- 8-a. Explain intrusion detection system with Block diagram. [CO5] 4
- 8-b. Define data security consideration? Explain this reference Data backup security. [CO5] 4

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