Subject Code:- AMCANC0201

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

MCA

SEM: II - THEORY EXAMINATION August-(2023)

Subject: Cyber Security

Time: 2 Hours

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

1. Attempt all parts:-

- It is not a tool of cybersecurity. (CO1) 1-a.
 - (a) Encryption

(b) IDS

(c) BOT

(d) Firewall

1-b. Is considered as the unsolicited commercial email. (CO2)

- (a) Virus
- (b) Worm
- (c) Spam
- (d) None of the above

1-c. It is the most viral section of the internet. (CO3)

- (a) Chat messenger
- (b) Social networking sites
- (c) Tutorial sites

15

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Max. Marks: 50

Printed Page:-

- (d) Chat-rooms
- 1-d. The system uses a trusted third party interface. (CO4)
 - (a) Public-Key Certificates
 - (b) Public announcements
 - (c) Publicly available directories
 - (d) Public-Key authority
- 1-e. Which of the following service provider provides the least amount of built in 1 security? (CO5)

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- (a) SaaS
- (b) PaaS
- (c) IaaS
- (d) All of the above

2. Attempt all parts:-

2.a.	Briefly explain the drawback of Prototype Model. (CO1)	2	
2.b.	What is a Credit Card? (CO2)	2	
2.c.	Explain Secure Architecture Design. (CO3)	2	
2.d.	Define Ciphertext with an example. (CO4)	2	
2.e.	Mention the steps involved in Security Evaluation process. (CO5)	2	
	SECTION B	15	
3. Answer any <u>three</u> of the following:-			
З-а.	Explain the components of Information System with their major activities. (CO1)	5	
3-b.	How does denial of service (DOS) attack affect a business organization? (CO2)	5	
3.c.	How social media is adversly affecting the cyber space community? Explain.	5	
	(CO3)		
3.d.	Ellaborate the advantages and disadvantages of Public key cryptography. (CO4)	5	
3.e.	Describe the important steps in security policy review. (CO5)	5	
	SECTION C	20	
4. Answer any <u>one</u> of the following:-			
4-a.	Discuss the role of Management Information Systems. (CO1)	4	
4-b.	Explain threat agent in detail. (CO1)	4	
5. Answer any <u>one</u> of the following:-			

5-a.What are the benefits of access control? (CO2)4

5-b.	Explain Network layer firewalls in detail. (CO2)	4	
6. Ansv	ver any <u>one</u> of the following:-		
6-a.	Discuss the steps that you will take to protect your backup files. (CO3)	4	
6-b.	Differentiate between authentication and authorization. (CO3)	4	
7. Answer any <u>one</u> of the following:-			
7-a.	Describe the working of public key infrastructure (PKI). (CO4)	4	
7-b.	Explain Symmetric and Asymmetric key encryption with proper example. (CO4)	4	
8. Ansv	ver any <u>one</u> of the following:-		
8-a.	What are security policy requirements? (CO5)	4	
8-b.	Explain the advantages of Supply Chain Management (SCM). (CO5)	4	
	2022 Jan-Jun		

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