GURU NANAK INSTITUTE OF TECHNOLOGY
An Autonomous Institute under MAKAUT
2022
INTRODUCTION TO CYBER SECURITY
MCA20-E205D

TIME ALLOTTED: 3 Hrs **FULL MARKS: 70**

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable

GROUP – A
(Multiple Choice Type Questions)

1.Answer any *ten* from the following, choosing the correct alternative of each question: **10×1=10**

			Marks	CO No.
1.	(i)	What is Cyber Security?	1	CO1
		a. Cyber Security provides security against malware		
		b. Cyber Security provides security against cyber-terrorists		
		c. Cyber Security protects a system from cyber-attacks		
		d. All of the mentioned		
	(ii)	What does cyber security protect?	1	CO5
		a. Cyber security protects criminals		
		b. Cyber security protects internet-connected systems		
		c. Cyber security protects hackers		
		d. None of the mentioned		
	(iii)	Who is the father of computer security?	1	CO1
		a. August Kerckhoffs		
		b. Bob Thomas		
		c. Robert		
		d. Charles		
	(iv)	Which of the following is defined as an attempt to steal, spy, damage or destroy computer systems, networks, or their associated information?	1	CO5
		a. Cyber-attack		
		b. Computer security		
		c. Cryptography		
		d. Digital hacking		
	(v)	Which of the following is a type of cyber security?	1	CO1
		a. Cloud Security		
		b. Network Security		
		c. Application Security		
		d. All of the above		

(vi) What is called the collective terms of malicious software, such as viruses, worms and trojans?　　　　1　CO2
    a. Spam
    b. Phishing
    c. Malware
    d. Harm

(vii) What is the full form of CIA under information security?　　　　1　CO5
    a. Confidentiality Integrity Availability
    b. Criminal Investigation Agency
    c. Cost Information Agency
    d. Credit Integrity Assessment

(viii) What is called periodic assessment of security vulnerability in computer system?　　　　1　CO1
    a. Threat
    b. Attack
    c. Hacking
    d. Security audit

(ix) A malicious program spreading through Internet and storage media and attacking the data in victims computer is called_____.　　　　1　CO5
    a. Worms
    b. Phishing attack
    c. Trojan
    d. Computer Virus

(x) Vulnerability for cyber attack may be in_____.　　　　1　CO2
    a. operating system
    b. application software
    c. IT infrastructure
    d. all of them

(xi) In Wi-Fi Security, which of the following protocol is more used?　　　　1　CO2
    a. WPA
    b. WPA2
    c. WPS
    d. Both A and C

(xii) Which one of the following systems cannot be considered as an example of the operating systems?　　　　1　CO2
    a. Windows 8
    b. Red Hat Linux
    c. BSD Linux
    d. Microsoft Office

GROUP – B
(Short Answer Type Questions)
(Answer any *three* of the following)

3 x 5 = 15

			Marks	CO No.
2.	a)	Define cyber security.	2	CO1
	b)	Explain the need of cyber security.	3	CO1
3.	a)	Explain the purpose of biometric. Where is biometric systems used	2	CO3
	b)	Where is biometric systems used	3	CO3
4.	a)	What are the 4 different types of blockchain technology?	2	CO5
	b)	What is difference between blockchain and crypto currency?	3	CO5
5.	a)	Define vulnerability assessment.	2	CO2
	b)	Explain threats that can be prevented by vulnerability assessment.	3	CO2
6.		Explain the Bell-LaPadula security property?	5	CO4

GROUP – C
(Long Answer Type Questions)
(Answer any *three* of the following)

3 x 15 = 45

			Marks	CO No.
7.	a)	Define the goal of Security System.	5	CO4
	b)	Explain the Operating System Security Policies and Procedures.	5	CO4
	c)	Explain three main types of intrusion detection system?	5	CO2
8.	a)	What are biometrics and its types?	3	CO4
	b)	Give the advantages and disadvantages of eye pattern recognition.	7	CO4
	c)	Explain the purpose of biometric.	2	CO4
	d)	Where is biometric systems used?	3	CO4
9.	a)	Differentiate between passive attack and active attack.	5	CO5
	b)	Explain any two security policies	5	CO5
	c)	Define confidentiality with an example	5	CO2
10.	a)	Explain Email Security Features	5	CO3
	b)	Explain Hybrid-AI cloud security	5	CO3
	c)	Describe SaaS provider infrastructure	5	CO3
11.		Write short note on: **(Any Three)**	3*5=15	
	a)	Virtual currency	5	CO4
	b)	Block Chain Technology	5	CO3
	c)	Bell-LaPadula security	5	CO2
	d)	Cyber-physical systems Design	5	CO3
	e)	IoT security architecture	5	CO3