

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

(An Autonomous Institute Affiliated to AKTU, Lucknow)

B. Tech (CSE)

(SEM:3<sup>rd</sup>, SESSIONAL EXAMINATION -I) (2021-2022)

Subject Name: Cyber Security

Time: 1.15Hours

SET A

Max. Marks:30

**General Instructions:**

- All questions are compulsory. Answers should be brief and to the point.
- It comprises of three Sections, A, B, and C. You are to attempt all the sections.
- **Section A** - Question No- 1 is objective type questions carrying 1 mark each, Question No- 2 is very short answer type carrying 2 mark each. You are expected to answer them as directed.
- **Section B** - Question No-3 is short answer type questions carrying 5 marks each. You need to attempt any two out of three questions given.
- **Section C** - Question No. 4 & 5 are Long answer type (within unit choice) questions, carrying 6marks each. You need to attempt anyone-part a or b.
- Students are instructed to cross the blank sheets before handing over the answer sheet to the invigilator.
- No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

<b><u>SECTION - A</u></b>		<b>[8]</b>	
<b>1.</b>	<b>Attempt all parts</b>	<b>(4×1=4)</b>	<b>CO</b>
a.	When an unauthorized person appears as another entity such an attack is called as ? a) Masquerade b) Replay attacks c) Denial of Services d) Release of message attacks	(1)	CO1
b.	When an unauthorized person gets access to a message what gets compromised? a) Integrity b) Confidentiality c) Authentication d) Non Repudiation	(1)	CO1
c.	An attack performed by setting the source IP address set equal to one of the IP address of the internal users? a) IP address spoofing b) Source Routing Attacks c) Tiny Fragments Attack d) Denial of services	(1)	CO1
d.	Which model takes risk analysis factor into consideration? a) Waterfall Model b) Spiral model	(1)	CO1

		c) Prototype model d) Incremental model		
2.	Attempt all parts		(2×2=4)	CO
	a.	Differentiate transaction processing system and process control system?	(2)	CO1
	b.	Differentiate passive attack and active attack?	(2)	CO1
<b>SECTION – B</b>				
3.	Answer any <u>two</u> of the following-		[2×5=10]	CO
	a.	What are the principles of security ? Discuss all in detail?	(5)	CO1
	b.	Explain information assurance and information security ? How are they different from each other ?	(5)	CO1
	c.	What do you mean by three dimensional information assurance model? Explain in detail?	(5)	CO1
<b>SECTION – C</b>				
4.	Answer any <u>one</u> of the following- (Anyone can be applicative if applicable)		[2×6=12]	CO
	a.	Explain different types of information system in detail?	(6)	CO1
	b.	How an information system is developed ? Explain any two models?	(6)	CO1
5.	Answer any <u>one</u> of the following-			
	a.	What do you mean by firewalls ? Discuss its types and configuration?	(6)	CO2
	b.	How does passive attacks and active attacks hamper the security of our information system ?	(6)	CO1