

Code No.: 22CSPC54

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CMR INSTITUTE OF TECHNOLOGY: HYDERABAD
UGC AUTONOMOUS

III–B. Tech.I–Semester-I- Mid Term Examinations – SEPTEMBER – 2024

INFORMATION AND CYBER SECURITY

(Common to CSE, CSM, CSD, AIM & CSC)

[Time: 120 Minutes]

[Max. Marks: 30]

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 5 marks. Answer all questions in Part A.
 3. Part B consists of 5 questions. Answer all 5 questions. Each question carries 5 marks and may have sub questions.
 4. Illustrate your answers with NEAT sketches wherever necessary.

PART-A

5 x 1M=5M

S. No.	Question	BTL	CO	PO
1	a State the Principles of Information Security?	1	1	2,3,6,8,12
	b Illustrate the difference between Threat and Attack.	2	1	2,3,6,8,12
	c Define encryption and decryption.	1	2	2,3,6,8,12
	d Describe VPN and its importance in Network Security.	1	2	2,3,6,8,12
	e List out the four principal components in OpenSSL.	1	3	2,3,6,8,12

PART-B

5 x 5M=25M

S. No.	Question	BTL	CO	PO
2	Explain the model of a Network Security with neat diagram.	2	1	2,3,6,8,12
OR				
3	Discuss various Risks and attacks types in Information and Cyber Security	2	1	22,3,6,8,12
4	Discuss Operating system vulnerabilities and its possible attacks.	2	1	2,3,6,8,12
OR				
5	Define exploits. Explain information gathering techniques.	3	1	2,3,6,8,12
6	Describe Digital Signature Algorithm with neat diagram.	2	2	2,3,6,8,12
OR				

7	Illustrate with a neat diagram the different phases in a SSL handshake Protocol mechanism.	2	2	2,3,6,8,12
8	Explain about S/MIME in detail	2	2	2,3,6,8,12
OR				
9	Describe various services provided by PGP in detail.	2	2	2,3,6,8,12
10	State the function of SHA-1? State its important features. Explain the outline of its compression function.	1	3	2,3,6,8,12
OR				
11	Define Steganography. Explain its working principles.	2	3	2,3,6,8,12