CMR INSTITUTE OF TECHNOLOGY: HYDERABAD
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
22CSPC54 INFORMATION AND CYBER SECURITY
Class: III B.Tech V Semester
LESSON PLAN

Unit No.	Name of the Topic	No. Of periods Required	Proposed Date	Completed Date	Remarks	Sign
I	**Introduction:** Essential Terminologies Information Security-Principles,	1				
	Network Security Model, NIA	1				
	Risks ,Breaches , Threats, Attacks, Exploits	1				
	Information gathering, Incident Response Team	1				
	Reporting Crime, Operating System Attacks, Application Attack	1				
	Reverse Engineering, Cracking Techniques	1				
	Financial Frauds	1				
	UNIT-I Total Classes	**7**				
II	**Cryptography**					
	Introduction to Cryptography	1				
	Message Authentication	1				
	Digital Signatures	1				
	Overview of Firewalls- Types of Firewalls	1				
	VPN Security	1				
	Security Protocols – Security at Application layer: PGP	1				
	S/MIME	1				
	Security at Transport layer: SSL	1				
	TLS	1				
	Security at Network layer: IPSec	1				
	UNIT-II Total Classes	**10**				
III	**Cryptanalysis and Cyber Offences:**	1				
	PART-A:					
	Open source/Free/ Trial Tools: Implementation of Cryptographic Techniques	1				
	Open SSL	1				
	Hash Value Calculation	1				
	MD5	1				
	SHA1, SHA-256	1				
	SHA-512	1				
	Introduction to Steganography	1				
	UNIT-III Total Classes	7				
	I MID EXAMINATION	24 Hours				
	PART-B:					

	Introduction to Cyber Offences	1				
	How Criminals Plan the attacks	1				
	Social Engineering	1				
	Cyber Stalking	1				
	Cyber Café and Cyber Crimes	1				
	Botnets	1				
	Introduction to Cloud Security	1				
	UNIT-III Total Classes	**7**				
IV	**Cyber Security Audit and Standards:**					
	Risk assessment and Management	1				
	Asset Classification	1				
	Crisis management plan	1				
	Resources Recovery strategy	1				
	Security Testing	1				
	International Standards	1				
	Analysis and logging	1				
	Security Certification	1				
	UNIT-IV Total Classes	**8**				
V	**Security policy and IT ACT:**					
	Security Policies	1				
	WWW policies, E-Mail Security policies	1				
	Policy Review process- Corporate Policies	1				
	Sample Security policies	1				
	Publishing and Notification requirement of the policies	1				
	Information Security Standards- ISO	1				
	Cyber laws in India- IT ACT-2000 Provisions	1				
	Intellectual Property law: Copy right Law	1				
	Software License and Patent Law	1				
	UNIT-V Total Classes	**9**				
	II MID EXAMINATION	24 Hours				
	Grand Total Classes	**48 Hours**				

Course Coordinator   **HOD**