



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING - CYBER SECURITY

Lesson Plan & Work-done Diary for AY:2025-26, Even Semester

Course with Code: Cryptography and Network Security -BCY602					Faculty: Mrs. Suhasini		Semester & Section: 6 th	
Module	Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-1	1		A model for Network Security, Classical encryption techniques	Chalk and Talk with PPT				
	2		Symmetric cipher model, Substitution ciphers-Caesar Cipher					
	3		Monoalphabetic Cipher, Playfair Cipher					
	4		Hill Cipher					
	5		Polyalphabetic Ciphers					
	6		One time pad, Steganography					
	7		Block Ciphers and Data Encryption Standards: Traditional Block Cipher structures					
	8		Data Encryption Standard (DES)					
	9		A DES Example					
	10		The strength of DES, Block cipher design principles.					



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MODULE-2	11		Pseudorandom number Generators: Linear Congruential Generators	Chalk and Talk with PPT				
	12		Blum Blum Shub Generator					
	13		Principles and Applications for public key cryptosystems					
	14		Requirements for public key cryptography, Public key Cryptanalysis					
	15		The RSA algorithm: Description of the Algorithm,					
	16		Computational aspects, The Security of RSA.					
	17		Diffie-Hellman key exchange: The Algorithm					
	18		Key exchange Protocols, Man-in-the-middle Attack, Elliptic Curve Cryptography					
	19		Analog of Diffie-Hellman key Exchange					
	20		Security of Elliptic Curve Cryptography					



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MODULE-3	21		Applications of Cryptographic Hash functions	Chalk and Talk with PPT				
	22		Two simple Hash functions					
	23		Key management and distribution					
	24		Key management and distribution					
	25		Symmetric key distribution using symmetric encryption					
	26		Symmetric key distribution using asymmetric encryption					
	27		Distribution of public keys					
	28		X.509 Certificates					
	29		X.509 Certificates					
	30		Public Key Infrastructures					



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MODULE-4	31		Remote user authentication principles	Chalk and Talk with PPT				
	32		Kerberos					
	33		Kerberos					
	34		Remote user authentication using asymmetric encryption					
	35		Web security consideration					
	36		Transport layer security					
	37		Transport layer security					
	38		Email Threats and comprehensive email security					
	39		S/MIME					
	40		Pretty Good Privacy					



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MODULE-5	41		Domain keys Identified Mail	Chalk and Talk with PPT				
	42		Domain keys Identified Mail					
	43		IP Security overview					
	44		IP Security Policy					
	45		IP Security Policy					
	46		Encapsulating Security Payload					
	47		Encapsulating Security Payload					
	48		Combining security associations					
	49		Internet key exchange					
	50		Internet key exchange					



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	Activity	Planned	Actual	Remarks
1	Theory Classes	50		
2	Assignments/Quizzes/ Self study	2/5		
3	Tutorials/ Extra classes	0		
4	Internal Assessments	3		
5	ICT based Teaching (% of usage in Curriculum)	50%		
Planning			Execution	
Faculty Signature: Mrs. Suhasini			Faculty Signature: Mrs. Suhasini	
HOD Signature:			HOD Signature:	