		LESSON PLAN: CRYPTOGRAPHY & NETWORK SECURITY(Th-1)
Discipline :		**Computer Science and Engineering**
Faculty :		**Namrata Naik**
Semester :		6th **Sem**
Duration :		**14 WEEKS (16th February 2023to 1st June 2023)**
Work Load :	**Lecture :**	**4 Lectures per week (50 minutes per Class)**
Week	Week Day	Theory
1st	1st	**Ch-1:**Introduction to attacks on Computers, Why we need for security
	2nd	Security approach
	3rd	Principles of security
	4th	Describing Types of attacks
2nd	5th	Describing Types of attacks
	6th	**Ch-2:** Introduction to Cryptography, Plain text & Cipher Text
	7th	Substitution techniques
	8th	Substitution techniques
3rd	9th	Transposition techniques
	10th	Encryption techniques
	11th	Decryption techniques
	12th	Symmetric key cryptography
4th	13th	Asymmetric key cryptography
	14th	Transposition techniques
	15th	Transposition techniques
	16th	**Ch-3:**Introduction to Symmetric & Asymmetric key algorithm
5th	17th	Discussion Symmetric key algorithm
	18th	Discussion Symmetric key algorithm
	19th	Asymmetric key algorithms
	20th	Asymmetric key algorithms
6th	21st	Data encryption standards
	22nd	Data encryption standards
	23rd	Over view of Asymmetric key cryptography
	24th	Over view of Asymmetric key cryptography
7th	25th	The RSA algorithm
	26th	The RSA algorithm
	27th	Symmetric & Asymmetric key cryptography

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	28th	Symmetric & Asymmetric key cryptography
8th	29th	Digital signature
	30th	Digital signature
	31st	**Ch-4:**Introduction to Digital certificate & Public key infrastructure
	32nd	Digital certificates
9th	33rd	Digital certificates
	34th	Private key management
	35th	Private key management
	36th	PKIX Model
10th	37th	PKIX Model
	38th	Public key cryptography standards
	39th	Public key cryptography standards
	40th	**Ch-5:** Introduction to Internet security protocols, Basic concept of Secure
11th	41st	Secure socket layer
	42nd	Secure socket layer
	43rd	Transport layer security
	44th	Transport layer security
2th	45th	Secure Hyper text transfer protocol(SHTTP)
	46th	Time stamping protocol (TSP)
	47th	Time stamping protocol (TSP)
	48th	Secure electronic transaction (SET)
13th	49th	**Ch-6:** Introduction to User authentication ,Authentication basics ,Password
	50th	Authentication Tokens
	51st	Certificate based authentication
	52nd	Biometric authentication
14th	53rd	**Ch-7:**Introduction to Network Security & VPN, Brief introduction of TCP/IP
	54th	Firewall
	55th	Firewall
	56th	IP Security
15th	57th	IP Security
	58th	Virtual Private Network (VPN)
	59th	Revision
	60th	Class Test

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