NM Institute Of Engineering and Technology, Bhubaneswar

DEPARTMENT:CSE

LESSON PLAN: Academic Year 2023-24 (Even Semester) COURSE: DIPLOMA SEMESTER

Subject/Code: Cryptography &Network Security Faculty Name: Hiren Kumar Pra

Sl. No.	Name of the Topic to Cover	Text Book	Teaching Method	Course Progress
1	Introduction To CNS	T1	P	
2	The need for security	T3	G	
3	Security approach	T2	P	
4	Principles of security	T2	G	
5	Types of attacks	T2	G	
6	Revision	T3	G	
7	Plaintext &Cipher Text	T2	P	
8	Substitution techniques	T1	G	
9	Substitution techniques contd...	T1	G	
10	Transposition techniques	T3	P	
11	Transposition techniques contd..	T1	G	
12	Encryption &Decryption	T2	P	
13	Symmetric key cryptography	T3	G	
14	Asymmetric key cryptography	T2	G	
15	Revision	T2	G	
16	Quiz Test	T1	G	
17	Symmetric key algorithm types	T3	P	
18	Overview of Symmetric key cryptography	T1	G	
19	Data encryption standards	T3	G	
20	Data encryption standards contd..	T2	G	
21	Overview of Asymmetric key cryptography	T3	G	
22	Asymmetric key cryptography contd…	T2	P	
23	The RSA algorithm	T3	G	
24	The RSA algorithm contd..	T2	G	
25	Symmetric &Asymmetric key cryptography	T1	G	
26	Symmetric &Asymmetric key cryptography contd…	T1	G	
27	Digital signature	T2	P	
28	Digital signature contd..	T2	P	
29	Question answer discussion	T1	G	
30	Digital certificates	T3	G	
31	Digital certificates contd..	T2	G	
32	Digital certificates contd..	T1	G	
33	Private key management	T3	G	
34	Private key management contd..	T3	P	
35	PKIX Model	T2	P	
36	PKIX Model contd..	T1	G	

37	Public key cryptography standards	T3	G	
38	Public key cryptography standards contd	T3	G	
39	Revision	T3	P	
40	Basic concepts of Internet security protocols	T2	P	
41	Secure socket layer	T1	G	
42	Secure socket layer contd..	T2	G	
43	Transport layer security	T3	G	
44	Secure Hypertext transfer protocol(SHTTP)	T1	G	
45	Secure Hypertext transfer protocol(SHTTP)contd..	T2	P	
46	Time stamping protocol(TSP)	T1	P	
47	Secure electronic transaction(SET)	T3	G	
48	Quiz Test	T3	P	
49	Authentication basics, Password	T2	P	
50	Authentication Tokens	T1	G	
51	Certificate based authentication	T2	P	
52	Biometric authentication	T1	P	
53	Question Answer Discussion	T2	G	
54	Brief introduction of TCP/IP	T1	P	
55	Firewall	T2	P	
56	IP Security	T1	G	
57	IP Security contd..	T3	P	
58	Virtual Private Network(VPN)	T1	P	
59	Virtual Private Network(VPN)contd	T1	G	
60	Discussion of previous year questions	T2	G	

Method of Teaching
G: Green Board Teach
P: Power Point Teachi

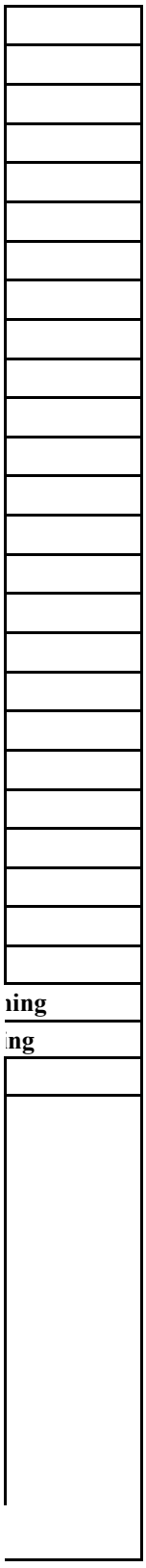
Faculty Signature		

After completion of this course the student will be able to:
Understand the basic concepts that of security approach
Learn about different attack on the computer systems.
Learn about the measures to save computer hardware and software
Understand different certification to ensure security.
Learn about basic concepts of firewalls and their use.
Understand privacy and security.

TEXT BOOKS:

A. Kahate ,Cryptography & Network security, TMH
W.Stallings Cryptography & Network Security Principals and Practices Prentice Hall
Pachghare Cryptography & Information security PHI

: 6th
haraj
Remark


ning
ng