LESSON PLAN FOR CSE 7TH SEM		
NAME OF THE INSTITUTE: TECHNOLOGY EDUCATION & RESEARCH INSTITUTE		
NAME OF TEACHER WITH DESIGNATION:		
ES		
1	Linux Startup: User accounts, accessing Linux - starting and shutting processes,	
2	Logging in andLogging out, Unix commands like zip, unzip, pack, ,	
3	unpack, compress, uncompress, Shell Programming	
4	Unix file system: Linux/Unix files,	
5	i-nodes and structure, file systemrelated commands,	
6	Shell as command processor,	
7	shell variables,	
8	creating command substitution,	
9	scripts, functions,	
10	conditionals, loops, customizing environment	
CHAPTER 2		
11	Regular Expressions and Filters:	
12	Introducing regular expressions patterns, syntax,	
13	character classes, quantifiers,	
14	introduction to grep,	
15	egrep, sed,	
16	programming with awk and perl,	
17	File Compression Techniques:	
18	data redundancy elimination using fingerprint generation deduplication and	
19	data similarities removal using delta techniques for data reduction storage,	
20	parallel compression with Xdelta utility	
CHAPTER 3		
21	The C Environment: C compiler, vi editor, compiler options, managing projects,	
22	memory management, use of makefile,	
23	cmake,	
24	dependency calculations,	
25	memory management –	
26	static and dynamic memory,	
27	static and dynamic libraries, dynamic loader,	

28	debugging tools like gdb,	
29	fixed-size and variable-size blocks of data files chunks divisor chunking techniques like Frequency Based Chunking and	
30	Content Defined Chunking Unix based open source coding.	
	CHAPTER 4	
31	Processes in Linux: Processes, starting and stopping processes, initialization processes, rc and init files,	
32	job control - at, batch, cron, time, network files, security,	
33	privileges, authentication,	
34	password administration, archiving,	
35	Signals and signal handlers, Threading,	
36	Linux I/O system, Networking tools like ping,	
37	telnet, ftp,	
38	route, Firewalls,	
39	Backup and Restore tar, cpio, dd.	
40	Case Study: PCOMPRESS open source free software	

LESSON PLAN FOR CSE 7TH SEM
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NAME OF TEACHER WITH DESIGNATION:

Lecture No.	Topics to be Covered	References
1	Computer Graphics applications,	
2	Display Devices,	
3	Display Devices,	
4	Point & Positioning Devices,	
5	Plotting Techniques for point and Line,	
6	Line drawing algorithms: DDA,	
7	Bresenhams's Circle drawing algorithms,	
8	Filled area algorithms: Scan line,	
9	Polygon filling algorithms,	
10	Boundary filled algorithms.	

	CHAPTER 2	
11	Window to view port transformation,	
12	Window to view port mapping,	
13	Two Dimensional transformation:	
14	translation,	
15	scaling,	
16	rotation,	
17	reflection and Shear,	
18	Homogeneous Coordinate system.	
19	3-D transformation: Rotation, Shear, translation,	
20	Numerical Problems of transformation viewing pipeline	
	CHAPTER 3	
21	Clipping: Point &	
22	Line clipping algorithm,	
23	4-bit code algorithm,	
24	Cohen-Sutherland Line clipping algorithms,	
25	Liang-Barsky line clipping algorithms.	
26	Polygon clipping:	
27	Sutherland-Hodgeman Polygon clipping algorithm.	
28	Curve clipping, Text clipping.	
29	Projection: Parallel, Perspective,	
30	Vanishing Points.	
	CHAPTER 4	
31	Representation of 3-D Curves and Surfaces:	
32	interpolation and approximation alpines, parametric conditions,	
33	Geometric continuity conditions, Beizer curves and surfaces:	
34	properties of beizer curves,	
35	beizer surfaces.	
36	Hidden Surfaces removal:	
37	Hidden surface elimination,	
38	depth buffer algorithm,	
39	scan line coherence and area coherence algorithm,	

40	priority algorithm	

LESSON PLAN FOR CSE 7TH SEM
NAME OF THE INSTITUTE: TECHNOLOGY EDUCATION & RESEARCH INSTITUTE
NAME OF TEACHER WITH DESIGNATION:

CRYPTO

Lecture No.	Topics to be Covered	References
1	Introduction	
2	cryptography,	
3	security threats,	
4	types of cryptography,	
5	Classical cryptography and	
6	their cryptanalysis,	
7	perfect secrecy,	
8	Shannon's theorem,	
9	stream ciphers,	
10	Security attacks	
	CHAPTER 2	
11	Access control mechanism,	
12	Discretionary v/s mandatory access control,	
13	CPA-secure encryption,	
14	Pseudorandom permutations,	
15	practical block ciphers (3-DES, AES), RSA,	
16	modes of operation, MACs,	
17	Hash functions-Tiger Hash,	
18	Gear hash,	
19	pseudorandom generators,	
20	Public key infrastructure.	

	CHAPTER 3	
21	CCA-secure encryption,	
22	Diffie-Hellman key exchange,	
23	Public key crypto systems (El Gamal, Paillier, Rabin, Goldwasser-Micali),	
24	Key exchange protocols,	
25	example protocol such as PGP,	
26	Kerberos,	
27	IPSEC/VPN,	
28	SSL,	
29	S/MIME etc.,	
30	PKCSv1.5	
	CHAPTER 4	
31	Digital signatures,-MD5,	
32	SHA1,	
33	Rabin Finger Print,	
34	digital certificates,	
35	DSS,	
36	firewall and	
37	intrusion detection systems,	
38	Byzantine agreement,	
39	secure multiparty computation,	
40	interactive proof systems	

LESSON PLAN FOR CSE 7TH SEM

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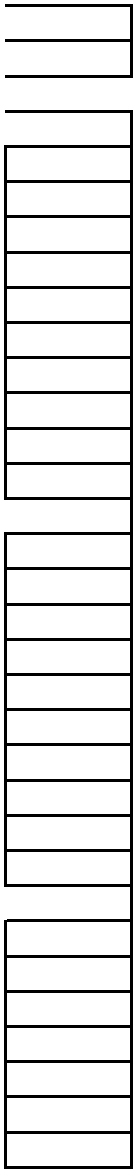
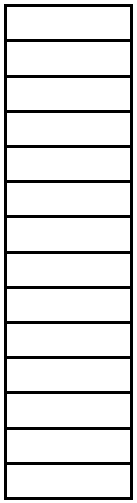
NAME OF TEACHER WITH DESIGNATION:

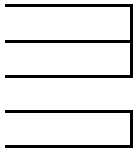
Lecture No.	Topics to be Covered	References
1	Introduction to AI programming languages, Blind search strategies,	
2	Breadth first – Depth first – Heuristic search techniques Hill Climbing	

3	– Best first – A Algorithms AO* algorithm –	
4	game tress, Min-max algorithms,	
5	game playing – Alpha beta pruning.	
6	Knowledge representation issues predicate logic –	
7	logic programming Semantic nets- frames and inheritance,	
8	constraint propagation;	
9	Representing Knowledge using rules,	
10	Rules based deduction systems.	
	CHAPTER 2	
11	Introduction to Expert Systems,	
12	Architecture of expert system,	
13	Representation	
14	and organization of knowledge,	
15	Basics characteristics,	
16	and types of problems handled by expert systems.	
17	Expert System Tools: Techniques of knowledge representations in expert systems,	
18	knowledge engineering,	
19	System-building aids, support facilities,	
20	stages in the development of expert systems.	
	CHAPTER 3	
21	Building an Expert System:	
22	Building an Expert System:	
23	Expert system development,	
24	Expert system development,	
25	Selection of tool,	
26	Selection of tool,	
27	Acquiring Knowledge,	
28	Acquiring Knowledge,	
29	Building process	
30	Building process	
	CHAPTER 4	

31	Problems with Expert Systems:	
32	Problems with Expert Systems:	
33	Difficulties,	
34	Difficulties,	
35	common pitfalls in planning,	
36	common pitfalls in planning,	
37	dealing with domain	
38	dealing with domain	
39	expert,	
40	expert,	







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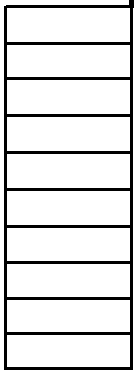

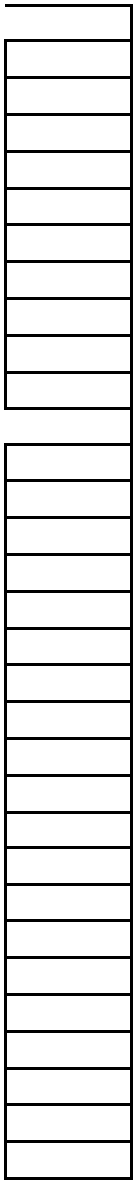

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