



DELHI COLLEGE OF TECHNOLOGY
MANAGEMENT(DCTM),
PALWAL

LECTURE PLAN

RECORD NO.: 00
Revision No.: 00

Department: CSE

Course Title: SOFT COMPUTING

Course No. 16CSE22C1

Semester/Section: 2nd /CSE

Session: Jan–May 2017

Instruction Plan Details:

Lecture No.	Topics to be covered	References	Remarks
Plan for course, to be covered			
UNIT 1			
1	Neural Networks : History, Overview of Biological Neuro-System	S. N. Sivanandam	
2	Mathematical Models of Neurons ANN architecture	S. N. Sivanandam	
3	Learning rules Gradient Descent Algorithm	S. N. Sivanandam	
4	Learning Paradigms- Supervised Unsupervised and Reinforcement Learning	S. N. Sivanandam	
5	ANN Training Algorithms- Perceptrons	S. N. Sivanandam	
6	Training Rules Delta	S. N. Sivanandam	
7	Back Propagation Algorithm	S. N. Sivanandam	
8	Multilayer Perceptron Model	S. N. Sivanandam	
9	Hopfield Networks Associative Memories	S. N. Sivanandam	
10	Applications of Artificial Neural Networks.	S. N. Sivanandam	
11	Test of 1st unit, Assignment 1.		

UNIT 2			
12	Fuzzy Logic: Introduction to fuzzy Logic	Klir & Yuan	
13	Classical and Fuzzy Sets Basic Types and Basic Concepts	Klir & Yuan	
14	Overview of Classical Sets Membership Function	Klir & Yuan	
15	Additional properties of α cuts Extension principle for fuzzy set	Klir & Yuan	
16	Fuzzy Rule generation.	Klir & Yuan	
17	Operations on Fuzzy Sets: <ul style="list-style-type: none"> • Compliment 	Klir & Yuan	
18	Fuzzy Intersection-t-norms Fuzzy Union-t-Conorms	Klir & Yuan	
19	Combination of Operation	Klir & Yuan	
20	Aggregation Operation	Klir & Yuan	
21	Test of 2nd Unit		
UNIT 3			
22	Fuzzy Arithmetic: <ul style="list-style-type: none"> • Fuzzy Numbers • Linguistic Variables 	Klir & Yuan	
23	Arithmetic Operations on Intervals & Numbers	Klir & Yuan	
24	Lattice of Fuzzy Numbers	Klir & Yuan	
25	Fuzzy Equations	Klir & Yuan	
26	Classical Logic Multi-Valued Logics	Klir & Yuan	
27	Fuzzy Propositions	Klir & Yuan	
28	Fuzzy Qualifiers Linguistic Hedges	Klir & Yuan	
29	Inference from conditional Fuzzy Proposition	Klir & Yuan	
30	Inference from conditional and qualified Proposition Inference from quantified proposition	Klir & Yuan	
31	Test of 3rd Unit, Assignment 2		
UNIT 4			

32	Uncertainty Based Information: Information & Uncertainty	Klir & Yuan	
33	Nonspecificity of Crisp Sets	Klir & Yuan	
34	Nonspecificity of Fuzzy Sets	Klir & Yuan	
35	Fuzziness of Fuzzy Sets	Klir & Yuan	
36	Uncertainty in Evidence Theory	Klir & Yuan	
37	Uncertainty measures for finite sets	Klir & Yuan	
38	Principles of uncertainty	Klir & Yuan	
39	Test of 4th Unit		
40	Doubt clearing and last year's paper discussion.		



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LECTURE PLAN

RECORD NO.: 00
Revision No.: 00

Department: CSE

Course Title: ALGORITHM DESIGN

Course No. 16CSE22C2

Semester/Section: 2nd /CSE

Session: Jan–May 2017

Instruction Plan Details:

Lecture No.	Topics to be covered	References	Remarks
Plan for course, to be covered			
UNIT 1			
1	Foundation & Elementary Data Structure: Algorithms	Srataj Sahni	
2	Performance analysis: Space & time complexity	Srataj Sahni	
3	Growth of functions Divide & Conquer	Srataj Sahni	
4	Recurrence Equations Basic elements of data structure : Stacks & Queues	Srataj Sahni	
5	Trees, Graphs, Linked List, Sorting & Order statistics	Srataj Sahni	
6	Data Structure: Dynamic sets & searching: Introduction	Srataj Sahni	
7	Array doubling, Amortized time analysis	Srataj Sahni	
8	R-B trees Hashing Dynamic equivalence relations & Union-Find programs	Srataj Sahni	
9	Priority queues with a decrease key operation	Srataj Sahni	
10	Graph & graph traversals: DFS	Srataj Sahni	
11	Strongly connected components Bi-connected components	Srataj Sahni	

	Test of 1st unit, Assignment 1.		
UNIT 2			
12	Greedy & Dynamic Method: General methods	Cormen	
13	Knapsack problem <ul style="list-style-type: none"> • 0/1 • Fractional 	Cormen	
14	Job sequencing with deadlines Minimum cost spanning trees,	Cormen	
15	Optimal merge patters, Single-source shortest path	Cormen	
16	Multistage graphs, All-pair shortest path	Cormen	
17	Optimal binary search trees	Cormen	
18	Travelling salesperson problem Flow shop scheduling	Cormen	
19	Backtracking & Branch and Bound: General methods 8 Queens problem	Cormen	
20	Sum of subsets Graph coloring	Cormen	
21	Hamiltonian cycles Knapsack problem	Cormen	
22	Travelling salesperson problem	Cormen	
23	Efficiency consideration	Cormen	
	Test of 2nd Unit		
UNIT 3			
24	NP-Hard & NP-Complete Problems: Basic concepts	Cormen	
25	Cook's Theorem	Cormen	
26	NP-hard graph problem NP-Hard scheduling problems	Cormen	
27	String Matching: Introduction, A straight forward solution,	Cormen	
28	The Knuth-Morris-Pratt algorithm	Cormen	
29	The Boyer-Moore algorithm	Cormen	
30	approximate string matching	Cormen	

	Test of 3rd Unit, Assignment 2		
UNIT 4			
31	Parallel Algorithms: Introduction, Parallelism	Cormen	
32	The PRAM and other models	Cormen	
33	PRAM algorithms	Cormen	
34	Handling write conflicts Merge and Sorting	Cormen	
35	Finding connected components	Cormen	
36	Approximation algorithms: Introduction	Cormen	
37	Absolute approximations ϵ - approximations	Cormen	
38	Polynomial time approximation schemes	Cormen	
39	Fully Polynomial time approximations schemes	Cormen	
40	Test of 4th Unit		
	Doubt clearing and last year's paper discussion.		



DELHI COLLEGE OF TECHNOLOGY
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LECTURE PLAN

RECORD NO.: 00
Revision No.: 00

Department: CSE

Course Title: INTERNET AND WEB DEVELOPMENT

Course No. 16CSE22D4

Semester/Section: 2nd /CSE

Session: Jan–May 2017

Instruction Plan Details:

Lecture No.	Topics to be covered	References	Remarks
Plan for course, to be covered			
UNIT 1			
1	Introduction: Internet protocol model	GreenLaw and Ellen Hepp	
2	Internet addresses IP Routing concepts	GreenLaw and Ellen Hepp	
3	Table Driven and next hop routing	GreenLaw and Ellen Hepp	
4	Other routing related protocols.	GreenLaw and Ellen Hepp	
5	Internet Access through PPP	GreenLaw and Ellen Hepp	
6	SLIP World wide web	GreenLaw and Ellen Hepp	
7.	Test of 1st unit, Assignment 1.		
UNIT 2			

8	Router technology: Hubs Bridges	GreenLaw and Ellen Hepp	
9	Routers, Routing Protocols	GreenLaw and Ellen Hepp	
10	Routing security	GreenLaw and Ellen Hepp	
11	Switch based routing	GreenLaw and Ellen Hepp	
12	Routing in unicast environment	GreenLaw and Ellen Hepp	
13	Multicasting	GreenLaw and Ellen Hepp	
14	Mobile Routing	GreenLaw and Ellen Hepp	
15	Test of 2nd Unit		
UNIT 3			
16	Web server and Browser Introduction	Deitel	
17	Web Servers (IIS/PWS & Apache)	Deitel	
18	HTTP request types	Deitel	
19	System architecture Client-side scripting	Deitel	
20	Accessing web servers	Deitel	
21	HTTP, secure HTTP Secure Sockets Layer	Deitel	
22	WWW Proxies	Deitel	
23	Web Browser, Bookmarks	Deitel	
24	Cookies Progress Indicators	Deitel	
25	Customization of Browsers, Browsing Tricks	Deitel	
26	Next Generation Web Browsing, Search Engines	Deitel	
27	Architecture of Search Engines Search Tools	Deitel	

28	Web Crawlers	Deitel	
29	Test of 3rd Unit, Assignment 2		
UNIT 4			
30	Website Development: DHTML XHTML	Frank Boumpery	
31	AJAX XML: Structuring data,	Deitel	
32	XML namespaces DTD and schemas	Deitel	
33	XML variables DOM methods	Deitel	
34	simple API for XML web services	Deitel	
35	Application of XML	Deitel	
36	Active Server Pages (ASP): Introduction	Deitel	
37	How ASP works ASP objects	Deitel	
38	file system objects ASP.NET	Deitel	
39	ASP.NET	Deitel	
40	Test of 4th Unit		
41	Doubt clearing and last year's paper discussion.		



DELHI COLLEGE OF TECHNOLOGY
MANAGEMENT(DCTM),
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LECTURE PLAN

RECORD NO.: 00
Revision No.: 00

Department: CSE

Course Title: COMPUTER FUNDAMENTALS

Course No. 16CSAF1

Semester/Section: 2nd /CSE

Session: Jan–May 2017

Instruction Plan Details:

Lecture No.	Topics to be covered	References	Remarks
Plan for course, to be covered			
UNIT 1			
1	Historical Evolution of Computing Systems: Overview of Data Processing History of Computing Computer Generations	P.K Sinha	
2	Characteristics of Computer, Anatomy of Computer, Classification of Computers.	P.K Sinha	
3	Number Systems and Codes: Introduction, Number Systems and its types	P.K Sinha	
4	inter-conversion of Number Systems; ASCII and EBCDIC codes	P.K Sinha	
5	Input and Output Devices: Concept of Input/Output	P.K Sinha	
6	Types of Input Devices; Output Devices: Printers, Plotters and Monitors.	P.K Sinha	
7.	Test of 1st unit, Assignment 1.		
UNIT 2			
8	Memory and Storage Devices: Characteristics of memory systems, memory hierarchy,	P.K Sinha	
9	Types of Memory: RAM, ROM	P.K Sinha	
10	Magnetic Disks, Magnetic Tapes, Optical Disks	P.K Sinha	

11	Concept of Cache Memory and Virtual Memory	P.K Sinha	
12	Software and Operating System Concepts: Introduction, Software Types	P.K Sinha	
13	Language translators, System Utility Software	P.K Sinha	
14	Application Software; Operating System: Characteristics, its functions, and its classification	P.K Sinha	
15	User Interfaces: CUI and GUIs. DOS and Windows operating systems.	P.K Sinha	
16	Test of 2nd Unit		
UNIT 3			
17	Using Word Processing: Opening and Closing of documents	Complete Reference	
18	Text creation and Manipulation, Moving Around in a Document	Complete Reference	
19	Formatting of text, Table handling, Spell check	Complete Reference	
20	language setting and thesaurus, Handling Multiple Documents Printing of word document	Complete Reference	
21	Using Spreadsheet tool: Basics of Spreadsheet	Complete Reference	
22	Manipulation of cells Formulas and Functions	Complete Reference	
23	Editing of Spread Sheet Page setups	Complete Reference	
24	header and footer, printing of Spread Sheet	Complete Reference	
25	Using Slide Presentation Tool: Basics of PowerPoint	Complete Reference	
26	Preparation and Presentation of Slides	Complete Reference	
27	Formatting and Clip Arts Slide Show	Complete Reference	

28	Taking printouts of presentation / handouts.	Complete Reference	
29	Test of 3rd Unit, Assignment 2		
UNIT 4			
30	Communication and Networks: Data Communication, Transmission Modes, Basics of Computer networks	N S Gill	
31	Types of computer network - LAN, MAN, WAN	N S Gill	
32	Network Topologies and Applications of Computer Networks	N S Gill	
33	Internet Basics: Concept of Internet, Application of Internet	N S Gill	
34	WWW Web-sites and URLs Search Engine	C.S. French	
35	Using Electronic mails, Instant Messaging, Web Browsing software	C.S. French	
36	Surfing the Internet Social Concern: Positive and Negative Impacts of Computer Technology	C.S. French	
37	Computer Crimes Computer Virus: Definition	C.S. French	
38	Types of viruses, Characteristics of viruses, anti-virus software	C.S. French	
39	Computer Applications: Data Analysis, Sports, Research, Education, Business, Medicines & Health Care, Weather Forecasting, Military.	N S Gill	
40	Test of 4th Unit		
	Doubt clearing and last year's paper discussion.		



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LECTURE PLAN

RECORD NO.: 00
Revision No.: 00

Department: CSE

Course Title: FUNDAMENTALS OF MANAGEMENT

Course No. 16IMSO1

Semester/Section: 2nd /CSE

Session: Jan–May 2017

Instruction Plan Details:

Lecture No.	Topics to be covered	References	Remarks
Plan for course, to be covered			
UNIT 1			
1	Introduction: concept and nature of management	Koontz	
2	Evolution of management thoughts	Koontz	
3	<ul style="list-style-type: none">• Traditional• Behavioural	Koontz	
4	<ul style="list-style-type: none">• system• contingency viewpoints	Koontz	
5	Test of 1st unit, Assignment 1.	Koontz	
UNIT 2			
6	Planning, decision making and organizing	Koontz	
7	Nature and elements of planning, planning types and models	Koontz	
8	Strategic planning – an overview	Koontz	
9	Basic issues in organizing – work specialization	Koontz	
10	Chain of command delegation	Koontz	
13	Decentralization, span of management	Koontz	

14	Bases for departmentation	Koontz	
15	Test of 2nd Unit		
UNIT 3			
16	Leading: Recognition of human factor	Koontz	
17	Motivation models/approaches	Koontz	
18	Leadership styles/behaviours	Koontz	
19	Personal characteristics of effective leaders	Koontz	
20	Leadership development	Koontz	
21	Test of 3rd Unit, Assignment 2		
UNIT 4			
22	Management control: concept and process	Koontz	
23	Overview of control techniques	Koontz	
24	Effective control system	Koontz	
25	Evaluating corporate social performance	Koontz	
26	Managing company ethics and social responsibility	Koontz	
27	Test of 4th Unit		
28	Doubt clearing and last year's paper discussion.		