

Lesson Plan

Discipline : CSE

Semester : 6th

Subject : Compiler Design(CSE-CSE-302N)

Week	Lecture Day	Topic (including assignment/test) (In Each Section)
1	1	Introduction: The structure of a compiler
	2	The role of the lexical analyzer
	3	Top down Parsing – Recursive Descent Parsing
	4	Revision
2	1	Predictive Parser Implementation
	2	Bottom-up Parsing
	3	Operator Precedence Parsing
	4	Revision
3	1	Precedence Matrix and Precedence functions
	2	Boolean matrices
	3	Shift Reduce Parser
	4	Revision
4	1	LR Parsers – SLR parsers
	2	Canonical Parsers- CLR Parser
	3	Assignmnet-1
	4	Class Test-1st unit
5	1	Introduction to syntax-directed translation scheme,
	2	syntax-directed translation scheme Of Desk calculator grammar
	3	Syntax Directed translation scheme of Postfix Notation
	4	Revision
6	1	Intermediate Languages – Three address code, its types
	2	Implementation of Three address code
	3	Declarations – Procedure, Scope information & Records, Back patching
	4	Sessional Test-1
7	1	Syntax Directed translation scheme of Assignment statements
	2	Syntax Directed translation scheme of Boolean expressions
	3	Symbol Tables Data structures for symbol tables
	4	Assignmnet-2
8	1	Storage allocation Strategies – static, stack and heap Allocation
	2	Run time storage administration
	3	Implementation of a simple stack allocation scheme
	4	Revision
9	1	Implementation of Block structured languages
	2	Error Detection and recovery method
	3	Error: Lexical phase errors
	4	Revision
10	1	syntactic phase error
	2	Semantic error
	3	Introduction: Principle sources of Optimization
	4	Revision
11	1	Loop Optimization method Basic blocks
	2	flow graphs
	3	Optimization of basic blocks
	4	Assignmnet-3
12	1	Loops in flow graphs, Next use information
	2	DAG representation of basic blocks
	3	Global data flow analysis
	4	Sessional Test-2
13	1	Access to non-local names, parameter passing
	2	A simple code generator
	3	Issues in the design of a code generator
	4	Revision
14	1	The target machine
	2	Code generator algorithm with examples
	3	Discussion on code generation issues

	4	Assignmnet-4
15	1	Runtime environment issues
	2	Peephole Optimization
	3	Revision
	4	Sessional Test-3

Lesson Plan-EIT (Theory & Lab)

Discipline : Computer Science and Engineering

Semester : 6th

Subject :Essentials of Information Technology (CSE-304N &CSE312N)

Week	Lecture Day	Topic (including assignment/test) (In Each Section)	Practical Day	Topic
1	1	Introduction to problem solving	N/A	Problem Solving using algorithms
	2	Computational problem and its classification - Logic and its types		
	3	Continue..Computational problem and its classification - Logic and its types		
2	1	Introduction to algorithms and flowchart	N/A	Design and test simple programs to implement Object Oriented concepts using Java
	2	Searching algorithms: linear search, binary search		
	3	sorting algorithms: insertion		
3	1	quick, merge and selection sort	N/A	Design and test simple programs to implement Object Oriented concepts using Java
	2	Introduction and classification to Data Structures		
	3	Basic Data Structures: array, stack, and queue		
4	1	Programming Basics: Identifiers, variables, data types	N/A	Design and test simple programs to implement Object Oriented concepts using Java
	2	operators, control structures		
	3	type conversion, casting		
5	1	arrays, strings	N/A	Design and test simple programs to implement Object Oriented concepts using Java
	2	Object Oriented Concepts fundamentals: class & object, instance variables & methods		
	3	Assignmnet-1/Test/Revision		
6	1	access specifiers, reference variables	N/A	Design and test simple programs to implement Object Oriented concepts using Java
	2	parameter passing techniques		
	3	constructors, this reference, static, and command line arguments		
7	1	Assignment Operators	N/A	Design simple data store using RDBMS concepts and implement
	2	Introduction to UML: Use case diagrams – Class diagrams		
	3	Continue..Introduction to UML: Use case diagrams – Class diagrams		
8	1	Relationships: aggregation, association	N/A	Design simple data store using RDBMS concepts and implement
	2	Inheritance, types of inheritance		
	3	Revision of Unit-I and Unit-II		
9	1	Polymorphism	N/A	Design simple data store using RDBMS concepts and implement
	2	overloading, constructor overloading		
	3	Dynamic polymorphism: method overriding		
10	1	Assignmnet-2/Test/Revision	N/A	Design simple data store using RDBMS concepts and implement
	2	abstract, interface, introduction to packages		
	3	Coding Standards and Best Practices		
11	1	tuning & optimization, clean code & refactoring	N/A	
	2	RDBMS- data processing, the database technology, data models		
	3	ER modelling concept, notations, converting ER diagram into relational schema		
12	1	Logical database design	N/A	
	2	normalization (1NF, 2NF and 3NF)		
	3	Continue..normalization (1NF, 2NF and 3NF)		
13	1	SQL: DDL statements, DML statements	N/A	
	2	statements, Joins, Sub queries		

	3	, Database design Issues, SQL fine-tuning		
14	1	Unit 1 revision		
	2	Unit 1 revision		
	3	Unit 2 revision		
15	1	Unit 2 revision		
	2	Unit 3 revision		
	3	Unit 4 revision		

Lesson Plan

Discipline : Computer Science and Engineering

Semester : 6th

Subject : Mobile Computing (CSE-306N)

Week	Lecture Day	Topic (including assignment/test) (In Each Section)	Practical Day	Topic
1	1	Introduction :Challenges in Mobile Computing	1	To Implement Cache Management for a Mobile Computing Environment.
	2	Coping with uncertainties, Resource Poorness, bandwidth etc.		
	3	Coping with uncertainties, Resource Poorness, bandwidth etc.		
2	1	Network topologies, protocols, interfaces and services	1	To Understand the Working of Peer to
	2	Cellular Architecture		
	3	Cellular Architecture ,Co-Channel Interference		
3	1	Frequency Reuse	1	To study and observe the difference b
	2	Capacity Increase By Cell Splitting, Evolution of Mobile System		
	3	Capacity Increase By Cell Splitting, Evolution of Mobile System		
4	1	CDMA,FDMA, TDMA	1	Performance comparison of routing p
	2	Mobility Management		
	3	Hand-offs, Types of Hand-Offs		
5	1	Location Management	1	To Calculate the Antenna gain & Antenna beam width.
	2	Gsm With Components		
	3	HLR-VLR Scheme		
6	1	Point to point protocol, FDDI, token bus, token ring	1	To study Kangraoo transaction and team transaction model.
	2	Hierarchical Scheme		
	3	CSMA, CSMA/CD, FDMA, TDMA, CDMA, LLC		
7	1	Predictive Location management Scheme	1	To study DSDV ,FSR,GSR, AODV PROTOCOL.
	2	Network devices-hubs,switches,Bridges,Router, Gateway		
	3	Mobile IP		
8	1	Routing techniques, static vs. dynamic routing		
	2	routing table, DHCP, IEEE standards 802.x		
	3	Data Dissemination By Broadcast		
9	1	Directory Service in Air		
	2	ICMP, IGMP, IPV6		
	3	Broadcast Disk , Energy Efficient Indexing Scheme for Push Based Data Delivery Model		
10	1	File System Support for Mobility		
	2	File System Support for Mobility		
	3	RPC		
11	1	Distributed File Sharing for Mobility Support		
	2	Token bucket algorithm		
	3	CODA		
12	1	Storage Manager for Mobilty Support.		
	2	Ad Hoc Network Protocols		
	3	Dsdv		
13	1	Cluster Based Gateway Switch Routing		
	2	Gsr		

	3	Fish Eye State Routing		
14	1	Ad Hoc On Demand Routing		
	2	Recovery Model For Mobile Transaction		
	3	Location Aided Routing ,Zsr, DSR		
15	1	E- Payment And Protocols.		
	2	Kangaroo Model , Team Transactions		
	3	Mobile Commerce		

Lesson Plan

Discipline : Computer Science and Engineering

Semester : 6th

Subject : Web Engineering (CSE-308N), WE LAB (CSE-312N)

Week	Lecture Day	Topic (including assignment/test) (In Each Section)	Practical Day	Topic
1	1	Information Architecture : The role of information Architect	1	Write 15 html tags with there descriptions .
	2	Collaboration and communication		
	3	Organizing information		
2	1	Organizational challenges,Organizing web sites and Intranets	2	Chalk out the storyboard and design of Diary Food Limited.
	2	Creating cohesive organization systems		
	3	Designing navigation systems		
3	1	Types of navigation systems,Integrated navigation elements	3	Create your own page with your favorite hobbies.
	2	designing elegant navigation systems		
	3	Searching systems,Searching your web site		
4	1	SOT I	4	Create a Menu or a table of content web page. Each menu item or section of the table of content should load a different web page.
	2	Designing the search interface,Indexing the right stuff,To search or not to search grouping content		
	3	conceptual design, High level Architecture Blueprint		
5	1	Architectural Page Mockups, Design Sketches.	5	First Term Viva
	2	Dynamic HTML and Web Designing : HTML Basic concepts Good web design		
	3	Sessional Test 1		
6	1	Process of web publishing ,Phases of web site development,	6	Create a web site for your college.
	2	STRUCTURE OF HTML documents, HTML elements- Core attributes		
	3	Language attributes, Core events, Block level events, Text level events		
7	1	Linking basics, Linking in HTML	7	Create a frameset that is divided into three sections. The frameset should have three zones.
	2	Images and Anchors, Anchor Attributes		
	3	Image Maps,Semantic Linking Meta Information,Image Preliminaries		
8	1	Image download issues, Images and buttons	8	Create a web page, which displays the map of your country Link, each city /state on the image map, such that the respective HTML page of the city/state is displayed when the user selects an area.
	2	Introduction to layout: Backgrounds, color and text, fonts, layout with tables		
	3	Advance layout: frames and layers, HTML and other media types.		
9	1	Audio support in browsers, video support, other binary formats	9	Incorporate a login page and use Java Script to build validations into the form.
	2	Style sheets, positioning with style sheets,FORM, form control, new and emerging form elements		
	3	HTML 5 Tags (Discussion)		
10	1	Sessional Test 2	10	NA
	2	Introduction to CGI, Alternative technologies,Hypertext transport protocol , URLs, HTTP		
	3	Browser requests, Server responses,Proxies, content negotiation		
11	1	SOT II	11	NA
	2	The common gateway interface , the CGI environment		
	3	Environment variables, CGI output		
12	1	Forms and CGI, sending data to the server	12	Use Style sheet to modify the following: Change background to modify the following.:-Change font type, face and color, Align Text, Remove underlines from hyperlinks.
	2	Form Tags ,Decoding from input		
	3	Architectural Guidelines, Coding Guidelines Efficiency and optimization		
13	1	Java server pages : Basics, Integrating Scripts n JSPs, JSP object and components	13	Mid-Term Viva

	2	Comforting and troubleshooting, JSP : Request and response objects		
	3	Retrieving the contents of an HTML format		
14	1	Retrieving a Query string, Working with Beans	14	Create a simple xml page.
	2	Cookies, Creating and Reading Cookies,Using Application Objects and Events		
	3	XML : Relationship between HTML, SGML and XML, Basic XML, Valid documents,ways to use XML		
15	1	XML for data files, embedding XML into HTML documents,Converting XML to HTML for Display	15	NA
	2	Displaying XML using CSS and XSL,Rewriting HTML as XML, the future of XML		
	3	SOT III/Revision		

Lesson Plan

Discipline : Computer Science & Engineering

Semester : VI

Subject : Software Engineering (CSE-310N)

Week	Lecture Day	Topic (including assignment/test) (In Each Section)	Practical Day	Topic
1	1	Software & Software Engineering: Introduction & Characteristics	1	To draw Use case & Class diagram in Rational Rose
	2	Software crisis : Factors & Remedies	2	
	3	Software engineering paradigms : Classical Waterfall Model	3	
2	1	Software engineering paradigms : Iterative Waterfall Model	1	To draw Interaction diagram in Rational Rose
	2	Software engineering paradigms :, Prototyping & Evolutionary Model	2	
	3	Software engineering paradigms : RAD Model	3	
3	1	Software engineering paradigms : Spiral Model	1	To draw Activity & Statechart diagram in Rational Rose
	2	Planning a Software Project, Software Size Metrics	2	
	3	Software cost estimation: Techniques	3	
4	1	Project scheduling : Work Break Down Structure	1	Build a work breakdown structure for the following: a) Delivery of the software initiation to development covering life cycle b) Development of prototype
	2	Personal planning	2	
	3	Team structure	3	
5	1	CPM Estimation	1	To draw 3 level DFDs. Modularize the CLPs & structure them in top down functional model
	2	Project scheduling : GANTT & PERT Chart	2	
	3	Assignment-1/Test/Revision	3	
6	1	Software configuration management : Introduction , Characteristics	1	Suggest an action plan for the risk factors without compromising the project, process or product parameters
	2	Risk Management	2	
	3	Project Monitoring	3	
7	1	Project Control	1	Implement the receipt acknowledgement & updation of inventory: i) Find UFP ii) Calculate FPC
	2	Quality Assurance	2	
	3	Software requirement analysis- Classification	3	
8	1	SRS Document: Features	1	To study object model of Hospital Management System
	2	Structure Analysis	2	
	3	Object Oriented Analysis	3	
9	1	Data Modeling	1	To study Task Analysis with example.
	2	Software requirement Specification	2	
	3	Software requirement validation	3	
10	1	Assignment-2/Test/Revision	1	Conduct a task analysis for Railway Reservation System.
	2	Design and implementation of software : Software design fundamentals	2	
	3	Design methodology :Structured design	3	
11	1	Design methodology :Object Oriented Design		
	2	Design Verification, Monitoring		
	3	Cohesion & Coupling		
12	1	Control coding , DFD & Flow Chart		
	2	Fault Avoidance & Tolerance		
	3	Software Reliabilities: Metric and specification		
13	1	Exception handling, Defensive programming		
	2	Assignment-3/Test/Revision		
	3	Testing – Testing fundamentals, Test Cases, White Box Testing Strategy		
14	1	Black Box Software Testing Strategy		
	2	Unit, Integration & System Testing		
	3	Validation testing, Debugging, CASE tools		
15	1	Software Maintenance – Maintenance characteristics, Maintainability		
	2	Maintenance task, Maintenance side effects		
	3	Assignment-4/Test/Revision		