GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT

LESSON PLAN

Name of Faculty: Ms. Alisha Sikri (Th), Ms. Sneha (Pr)
Discipline:- B. Tech. (CSE)
Semester: 6th
Subjects: Artificial Intelligence (CSE 308 B, CSE 328 B)
Lession Plan Duration: 15 Weeks (from January,2018 to April,2018)
Workload(Lecture/Practical) per week (in hours) : Lecture-03, Practicals -02 hours

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Day	Topic
1st	1st	Foundation and history of AI	1st	
	2nd	AI problems and techniques		Introduction to PROLOG
	3rd	AI programming Languages		
2nd	4th	Introduction to LISP and PROLOG- problem spaces and searches	2nd	
	5th	Problem Spaces and searches		To Diagnose diseases using PROLOG
	6th	Blind search strategies		
3rd	7th	Test	3rd	File Check & Viva
	8th	Breadth first- Depth first-		
	9th	Heuristic search techniques		
4th	10th	Hill climbing: best first	4th	
	11th	A * algorithm AO*algorithm		To find factorial of a number using PROLOG
	12th	AO* Algorithm		
5th	13th	Game Tree	5th	
	14th	Min max algorithms		Determine the colour,model,price of the vehicle with its customer name
	15th	Game playing		
6th	16th	Alpha beta pruning	6th	File Check & Viva
	17th	Test		
	18th	Knowledge representation issues		
7th	19th	Predicate logic- logic programming	7th	
	20th	Semantic nets- frames and Inheritance		Program for fibonacci series using PROLOG
	21st	constraint propagation		
8th	22nd	Representing knowledge using rules	8th	
	23rd	Rules based deduction Systems		To convert a string from upper clase to lower case and vice versa
	24th	Test		
9th	25th	Reasoning under uncertainty	9th	File Check & Viva
	26th	Review of probability		
	27th	Baye's probabilistic interferences		
10th	28th	Dempster Shafer Theory	10th	
	29th	Test		Program to implement Breadth first search
	30th	Heuristic methods		
11th	31st	Symbolic reasoning under uncertainty		
	32nd	Statistical reasoning	11th	Program to implement Depth first search
	33rd	Test		
12th	34th	Fuzzy Reasoning	12th	File Check & Viva
	35th	Temporal reasoning		
	36th	Non monotonic reasoning.		
13th	37th	Test	13th	
	38th	Principles of Natural language processing		Program of Insertion Sort in PROLOG
	39th	Rule based systems architecture		
14th	40th	Expert systems	14th	Program for solving 8-QUEENS problems
	41st	Test		
	42nd	Knowledge acquisition concepts		
15th	43rd	AI application to robotics	15th	File Check & Viva
	44th	Current trends in intelligent systems		
	45th	Test		

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT

LESSON PLAN

Name of Faculty: Ms. Kirti Rana
Discipline:- B. Tech. (CSE)
Semester: 6th
Subjects: Compiler Design (CSE 304 B, CSE 324 B)
Lession Plan Duration: 15 Weeks (from January,2018 to April,2018)
Workload(Lecture/Practical) per week (in hours) : Lecture-03, Practicals -02 hours

Week	Theory		Practical	
	Lecture Day	**Topic (including assignment/test)**	**Practical Day**	**Topic**
1st	1st	Compiler & translators, need of translators	1st	Practice of LEX/YACC of compiler writing.
	2nd	Structure of Compiler, its phases		
	3rd	Passes in Compilation & Compiler construction tools		
2nd	4th	Introduction, Role and Design of Lexical Analyzer, Input buffering	2nd	To show all the operations of a stack.
	5th	Specification & recognition of tokens, regular Expression, Finite automata		
	6th	Conversion from regular expression to finite automata & vice versa		
3rd	7th	Minimizing number of states of DFA	3rd	To show various operations i.e. red, write and modify in a text file.
	8th	A language specifying Lexical analyzer & implementation of lexical analyzer		
	9th	Test		
4th	10th	Role of Parser & definition of Parsing	4th	File Check & Viva
	11th	Context free grammars		
	12th	Parsing Technique & shift reduce parsing		
5th	13th	Operator Precedence Parsing	5th	Write a program to find leading terminals.
	14th	Operator Precedence Parsing Algo & example		
	15th	Top down parsing with backtracking		
6th	16th	Top down parsing without backtracking	6th	Write a program to find trailing terminals.
	17th	Introduction to Predictive Parsers		
	18th	Elements of Predictive Parser		
7th	19th	Example of Predictive Parsers	7th	Write a program to compute FIRST of non-terminal.
	20th	LR parser		
	21st	SLR parser		
8th	22nd	Example of SLR parser	8th	File Check & Viva
	23rd	Canonical LR parser		
	24th	Example of SLR parser		
9th	25th	LALR parser	9th	Write a program to compute FOLLOW of non-terminal.
	26th	Example of LALR Parser		
	27th	Test		
10th	28th	Syntax directed definition & construction of syntax trees	10th	Write a program to check whether a grammar is left Recursion and remove left Recursion.
	29th	Syntax directed translation scheme		
	30th	Implementation of syntax directed translation		
11th	31st	Three address code	11th	Write a program to remove left factoring.
	32nd	Quadruples & triples		
	33rd	Symbol table & its content		
12th	34th	Data structure for symbol tables	12th	Write a program to check whether a grammar is operator precedent.
	35th	Error & lexical phase error		
	36th	Syntactic error & semantic error		
13th	37th	Test	13th	Write a program to check whether a string belong to the grammar or not.
	38th	Code Optimization		
	39th	Loop optimization		
14th	40th	global data flow analysis	14th	Write a program to generate a parse tree.
	41st	Code generation		
	42nd	forms of object code		
15th	43rd	Register allocation for temporary varibles	15th	File Check & Viva
	44th	Register allocation for user defined variables		
	45th	Test		

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT

LESSON PLAN

Name of Faculty: Ms. Taruna
Discipline:- B. Tech. (CSE)
Semester: 6th
Subjects: Programming Language (CSE 312 B)
Lession Plan Duration: 15 Weeks (from January,2018 to April,2018
Workload(Lecture/Practical) per week (in hours) : Lecture-03

	Theory	
Week	Lecture Day	Topic (including assignment/test)
	1st	Syntactic and semantic rules of a Programming language
	2nd	Characteristics of a good programming language
1st	3rd	Programming language translators compiler & interpreters
	4th	Virtual Computers & Binding times
	5th	Introduction to procedural, non-procedural language
2nd	6th	Structured language, Functional language
	7th	Object oriented programming language
	8th	Comparison of C & C++ programming languages
3rd	9th	Test
	10th	Elementary data types – data objects, variable & constants
	11th	Specification & implementation of elementary data types
4th	12th	Declarations ,type checking & type conversions
	13th	Assignment & initialization , data types
	14th	Numeric data types, enumerations
5th	15th	Booleans & characters, Sets, files
	16th	Structured data types& data Objects
	17th	Specification & implementation of structured data types
6th	18th	Declaration & type checking of data structure
	19th	Character strings, variable size data structures
	20th	Union, pointer & programmer defined data objects
7th	21st	Test
	22nd	Implicit & explicit sequence control
	23rd	Sequence control within expressions
8th	24th	Sequence control within statement
	25th	Simple call return
	26th	Recursive subprograms
9th	27th	Exception & exception handlers
	28th	Co routines, Sequence control
	29th	Names & referencing environment
10th	30th	Static & dynamic scope, block structure
	31st	Local data & local referencing environment
	32nd	Shared data (dynamic & static scope), Parameters& parameter transmission schemes.
11th	33rd	Test
	34th	Major run time elements requiring storage
	35th	Programmer and system controlled storage management
12th	36th	Programmer and system controlled storage phases
	37th	Static storage management
	38th	Stack based storage management
13th	39th	Heap storage management
	40th	Variable & fixed size elements
	41st	Evolution of data type concept
14th	42nd	Abstraction, encapsulation & information hiding
	43rd	Subprograms
	44th	Type definitions, Abstract data types
15th	45th	Test

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT

LESSON PLAN

Name of Faculty: Ms. Rachna
Discipline:- B. Tech. (CSE)
Semester: 6th
Subjects: SOFTWARE ENGINEERING(CSE310 B)
Lession Plan Duration: 15 Weeks (from January,2018 to April,2018)
Workload(Lecture/Practical) per week (in hours) : Lecture-03

Week	Theory	
	Lecture Day	**Topic (including assignment/test)**
1st	1st	Introduction to Software Engineering
	2nd	importance of Software, The Software Evolution,Software
	3rd	Software Crisis: Problem and Causes.
2nd	4th	Software Development Life Cycle model
	5th	Personal Software process (PSP) and Team Software process (TSP
	6th	Test
3rd	7th	Overview of agile process,aspect oriented programming
	8th	Software Requirement Specification,Requirement elicitation and Validation
	9th	Information and analysis classes,flow and behavioral modeling
4th	10th	System Design: Design Concepts
	11th	design models for architecture, component
	12th	Test
5th	13th	data and user interfaces; Problem Partitioning
	14th	Abstraction, Cohesiveness, Coupling
	15th	Top Down and Bottom Updesign approaches
6th	16th	Functional Versus Object Oriented Approach
	17th	Design Specification, 4GL
	18th	Test
7th	19th	Coding: TOP-DOWN and BOTTOM-UP structure programming
	20th	Information Hiding, Programming
	21st	Internal Documentation, Verification
8th	22nd	Software Testing: Levels of Testing, Functional Testing
	23rd	Structural Testing, Test Plan, Test Case
	24th	Specification, Software Testing Strategies, Verification & Validation
9th	25th	Unit, Integration Testing
	26th	Test
	27th	Down and Bottom Up Integration Testing
10th	28th	Alpha & Beta Testing, White box and black box testing
	29th	System Testing and Debugging
	30th	Software Configuration Management, Overview of Software Quality
11th	31st	Control and Quality Assurance, ISO 9000 Certification for Software Industry
	32nd	SEI Capability Maturity Model (CMM)
	33rd	Comparison between ISO & SEI CMM.
12th	34th	Test
	35th	A Framework for Technical Software Metrics,
	36th	Metrics for the Analysis Model
13th	37th	Metrics for Design Model, Metrics for Source Code,
	38th	Metrics for Testing
	39th	Test
14th	40th	Metrics for Maintenance.
	41st	CASE and its Scope
	42nd	CASE support in Software Life Cycle
15th	43rd	Documentation Support, Architecture of CASE Environment.
	44th	Exposure to CASE tools like Rational Software suit
	45th	Turbo Analyst, SilkSuite

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT

LESSON PLAN

Name of Faculty: Ms REKHA MANN
Discipline:- civil/mech/cse
Semester: 6th
Subject; REPORT WRUTING AND ORAL PRESENTATION SKILLS
Lession Plan Duration: 15 Weeks (from January,2018 to April,2018)
Workload(Lecture/Practical) per week (in hours) : Lecture-03 ,Practicals -02 hours

Week	Theory		Practical	
	Lecture Day	**Topic (including assignment/test)**	**Practical Day**	**Topic**
1st	1st	Introduction to unit-1	1st	Group discussion
	2nd	Meaning of Report		
	3rd	Importance of report		
2nd	4th	test	2nd	Purpose and process of GD
	5th	Types of Report		
	6th	Revision		
3rd	7th	test	3rd	Test
	8th	Informational and Analytical report		
	9th	Routine report		
4th	10th	oral report	4th	What and why of group discussion
	11th	Revision		
	12th	Test		
5th	13th	Written report	5th	Do's and donot of GD
	14th	Diffrence between orao and written report		
	15th	formal report		
6th	16th	Informal report	6th	Test
	17th	Diffrence between formal and informal report		
	18th	Revision		
7th	19th	Test	7th	More about GD
	20th	Other types of report		
	21st	Format of report		
8th	22nd	letter report	8th	Revision
	23rd	Memo format		
	24th	inspection report		
9th	25th	Manuscript format	9th	Test
	26th	Revision		
	27th	ORAL TEST		
10th	28th	Written test	10th	Importance of GD
	29th	Structure of the report		
	30th	Structure of the formal and informal report		
11th	31st	Text of the report	11th	Oral communication skills
	32nd	Supplementary parts		
	33rd	Revision		
12th	34th	Test	12th	Group etiquette
	35th	Introduction to unit-2		
	36th	Procedure of writing report		
13th	37th	Reports on technical topics	13th	Mock interview
	38th	Report on business topics		
	39th	Test		
14th	40th	Revision of section-1	14th	Mock interview activity
	41st	Test		
	42nd	Revision of full syllabus		
15th	43rd	Revision of full syllabus	15th	TEST
	44th	Revision of full syllabus		
	45th	Test		

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT

LESSON PLAN

Name of Faculty: Mr. Anil Kumar
Discipline:- B. Tech. (CSE)
Semester: 6th
Subjects: Advanced Java Programming (CSE 306 B, CSE 326 B)
Lession Plan Duration: 15 Weeks (from January,2018 to April,2018)
Workload(Lecture/Practical) per week (in hours) : Lecture-03, Practicals -02 hours

Week	Theory		Practical	
	Lecture Day	**Topic (including assignment/test)**	**Practical Day**	**Topic**
1st	1st	Introduction to Java, Structure of Java Programs	1st	WAP to store Acno, Name, Balance in a class. Compute Interest as 8% of Balance >= 75000, Interest as 6% if Balance >= 40000 else 3%.
	2nd	Control Statements - sequence, selection & looping		
	3rd	Working with Arrays and Strings		
2nd	4th	Concepts of Classes and Methods	2nd	WAP to accept 2 numbers. Divide 1st no. by 2nd & display the result. Display user defined error message if 2nd no. is zero.
	5th	Use of Constructors & Polymorphisms		
	6th	Test		
3rd	7th	Inheritance and interfaces	3rd	File check & Viva
	8th	Packages & Exception Handling		
	9th	I/O & File Streams		
4th	10th	AWT Programming	4th	Write a program in Java for illustrating overloading, over riding and various forms of inheritance.
	11th	Applet Programming		
	12th	Test		
5th	13th	Swing, JApplet, Icons and Labels,	5th	Write programs to create packages and multiple threads in Java.
	14th	Buttons & Text Fields		
	15th	Check Box, Radio Buttons		
6th	16th	Container, Panel, Windows, Frame	6th	File check & Viva
	17th	Combo Box & List Box		
	18th	Test		
7th	19th	Scroll & Tabbed Panes	7th	Write programs in Java for event handling Mouse and Keyboard events.
	20th	Trees & Tables		
	21st	Custom rendering of Jlist cells		
8th	22nd	JDBC Fundamental, Design of JDBC, SQL, JDBC Installation	8th	Using Layout Manger create different applications.
	23rd	JDBC Programming		
	24th	Working with statements, Creating & Executing SQL statements		
9th	25th	Working with result set and meta data	9th	Test
	26th	Test		
	27th	Bean Writing Process		
10th	28th	naming Pattern for bean	10th	Write programs in Java to create and manipulate Text Area, Canvas, Scroll Bars, Frames, and menus using swing/AWT.
	29th	Starting & working with BDK		
	30th	Use of JAR file, use of Bean API		
11th	31st	Introduction & use of Servlets	11th	Using Java create Applets.
	32nd	Creating, Compiling & running Servlets		
	33rd	Reading servlet parameters		
12th	34th	Test	12th	File check & Viva
	35th	Handling HTTP request & Response		
	36th	Examples of HTTP request & Response		
13th	37th	working with Servlet packages	13th	Using Java language for Client Server Interaction with stream socket connections.
	38th	Cookies and Session Tracking		
	39th	Test		
14th	40th	JSP Architecture, JSP Access Model	14th	Write a program in Java to read data from disk file.
	41st	JSP syntax basics		
	42nd	concept of Implicit Objects, Object Scope		
15th	43rd	working with Implicit Objects	15th	File check & Viva
	44th	Synchronization & Session Management.		
	45th	Test		