Lesson Plan

Discipline : Computer Engineering
Semester : **6**th
Subject : **Application Development Using Web Frame Work**
Lesson Plan Duration : 15 Weeks
Work Load(Lecture/ Practical) per week (in hours): Practicals – **06**

Week	Practical	
	day	Topic
1st	1	1. Practice on HTML, CSS, Java Script, Ajax.PHP & MySql
2nd	2	2. Install WordPress & Create Blogs
3rd	3	3. Manage blogs features e.g. Images, Text Around Images, Comments, Post Formats, Linking, Pages, Categories, Smilies, Feeds, Gravatars, Password Protection
4th	4	4. Practice various designing features: Colour Scheme, Headers, CSS Horizontal Menus, Dynamic Menu, Highlighting, Navigation Links, Print
5th	5	5. Read More, Formatting Date and Time, Finding CSS Styles, Creating Individual Pages, Uploading Files, Using WordPress Themes, Templates, Template Tags, Template Hierarchy, Validating a Website, Know Your Sources, WordPress Site Maintenance
6th	6	6. Integrate PHP & MySql with WordPress
7th	7	7. Install Moodle & various plugins,
8th	8	8. Create a Moodle site and Database Schema
9th	9	9. Design Site appearance, Front page, Front page settings, My Moodle, User profiles, Navigation, Course list, Themes, Theme settings, Header and footer, Language settings, Using web services, Publishing a course, Blogs, RSS feeds
10th	10	10. Manage Moodle site, Managing authentication, Manual accounts, No login, Email-based self- registration,Account
11th	11	11. Create Roles and permissions, Assign roles,
12th	12	12. Implement Password salting.
13th	13	13. Perform Site backup, Course backup, Course restore, Automated course backup
14th	14	Revision
15th	15	Revision

Lesson Plan

.Discipline : Computer Engg.
Semester : 6th
Subject : Project
Lesson plan duration : 15 weeks

Week	Practical	
	Practical Day	Topic
1st Week	1st	Selection of Project
	2nd	Selection of Project
Week 2	1st	Finalization of Project
	2nd	Finalization of Project
Week 3	1st	Outline of Project
	2nd	Outline of Project
Week 4	1st	Planning of Project
	2nd	Planning of Project
Week 5	1st	Execution of Project
	2nd	Execution of Project
Week 6	1st	Execution of Project
	2nd	Execution of Project
Week 7	1st	Execution of Project
	2nd	Execution of Project
Week 8	1st	Execution of Project
	2nd	Execution of Project
Week 9	1st -G	Execution of Project
	2nd	Execution of Project
Week 10	1st	Providing Solution of Problems
	2nd	Providing Solution of Problems
Week 11	1st	Production of Final Executed project
	2nd	Production of Final Executed project
Week 12	1st	Checking of Final Project
	2nd	Checking of Final Project
Week 13		

	1st	Report writing
	2nd	Report writing
Week 14	1st	Seminar
	2nd	Seminar
Week 15	1st	Viva-Voce
	2nd	Viva-Voce

LessonPlan

Discipline : ComputerEngineering

Semester : 5th

Subject : SOFTWARE ENGINEERING

Workloadperweek : Lecture–03

Week	Theory	
	Lecture Day	Topic (Includingassessment/test)
1st	1st	1.IntroductiontoSoftwareEngineering(6hrs.)Introduction, Programmev/sSoftware
	2nd	ProductsEmergenceofSoftwareEngineering-EarlyComputerProgramming,
	3rd	High-levelLanguageProgramming,Controlflow-basedDesign
2nd	4th	Data StructureOrientedDesign,
	5th	ObjectOrientedDesign
	6th	SoftwareLifeCycleModels
3rd	7th	RequirementofLifeCycleModel, ClassicWaterfall Model,
	8th	PrototypingModel,EvolutionaryModel
	9th	RequirementofLifeCycleModel, ClassicWaterfall Model,
4th	10th	PrototypingModel,EvolutionaryModel
	11th	SpiralModel
		Comparison ofdifferentLifeCycleModels
	12th	SoftwarePlanning
5th	13th	ResponsibilitiesofSoftware
	14th	ProjectManager-MetricsforProjectSizeEstimation-
	15th	LOC(LinesofCode),FunctionPointMetric
6th	16th	ProjectestimationTechniques
	17th	UsingCOCOMOModel,
	18th	Halstead'sSoftwareScience
7th	19th	.RequirementAnalysisandSpecification
	20th	RequirementgatheringandAnalysis

	21st	SoftwareRequirementSpecifications(SRS)
8th	22nd	FormalSpecificationTechnique
	23rd	CharacteristicsofgoodSRS
	24th	SoftwareDesignandImplementation
9th	25th	CharacteristicsandfeaturesofgoodSoftware
	26th	DesignCohesionandCoupling
	27th	SoftwaredesignApproaches
10th	28th	FunctionOrientedDesign,
	29th	ObjectOrientedDesign,StructuredCodingTechniques
	30st	CodingStyles,documentation
11th	31nd	Software TestingConceptofTesting
	32rd	Verificationv/sValidations
	33th	UnitTesting,Blackbox Testing
12th	34th	WhiteBox Testing
	35th	Integrationtesting
	36th	Systemtesting
13th	37th	.SoftwareQuality
	38th	andMaintenance
	39th	IntroductiontoCapabilityMaturitymodel
14th	40st	ISO9000
	41nd	SixSigma
	42rd	ConfigurationManagement
15th	43th	revision
	44th	revision
	45th	revision

Lesson Plan

Discipline: ComputerEngg.
Semester: 4th
Subject: OOPS Using JAVA
Lesson Plan Duration: 15 weeks
Work Load (Lecture/Practical) per week (In hour): Lecture-03,Practical - 03

WEEK	THEORY		PRACTICAL	
1st	LECTURE DAY	TOPIC	PRACTICALDAY/PERIOD	TOPIC
	1	**UNIT1 INTRODUCTION AND FEATURES** Fundamentals of object oriented programming	1-3	1. Write a program in JAVA to print "Hello" using classes.
	2	Procedure oriented programming Vs.objectorientedprogramming(OOP)		
	3	Object oriented programming concepts– Classes, object, object reference		
2nd	1	Abstraction,encapsulation	1-3	2. Write a program to input using Scanner Class.
	2	Inheritance,polymorphism		
	3	Introduction of eclipse(IDE) for developing programs in Java		
3rd	1	**UNIT2 LANGUAGE CONSTRUCTS** Review of constructs of C used in JAVA: variables	1-3	3. Write a program to print factorial of a Number.
	2	Types and type declarations		
	3	Datatypes		
4th	1	Increment operators	1-3	4. Write a program to create a Class and make objects of that class.
	2	Decrement operators		
	3	Relational and logical operators		
5th	1	If then else clause; conditional expressions	1-3	5. Create a class with data members Feet, Inches and add them.
	2	Input using scanner class and output statement		
	3	Loops,switchcase,arrays,methods		
6th	1	**UNIT3 CLASSES AND OBJECTS** Creation	1-3	6. Createa class using constructors.
	2	Accessing class members		
	3	Private Vs Public Vs Protected Vs Default		
7th	1	Constructors	1-3	7. Create a class and
	2	Object		

	3	Object Reference		show the use of Single inheritance.
8th	**1**	**UNIT4 INHERITANCE** Definition of inheritance	1-3	8. Create a class and show the use of multiple inheritance.
	2	Protected data		
	3	Public data, Constructor chaining		
9th	**1**	Order of invocation	1-3	9. Create a class and show the use of Multi-level inheritance.
	2	Types of inheritance		
	3	Single inheritance		
10th	**1**	Multilevel inheritance,	1-3	10. Create a class showing theuse of Constructor Overloading.
	2	Hierarchical inheritance		
	3	Hybrid inheritance		
11th	**1**	**UNIT5 POLYMORPHISM** Method overloading	1-3	11. Createaprogram showing the use of Interfaces.
	2	Constructor overloading		
	3	Method overriding		
12th	**1**	Up-casting	1-3	12. Createaprogram using Try and Catch Block.
	2	Down-casting		
	3	**UNIT6 ABSTRACT CLASS & INTERFACE** Key points of Abstract class		
13th	**1**	Interface	1-3	Revision
	2	Difference between an abstract class & interface		
	3	Implementation of multiple inheritance Through interface		
14th	**1**	**UNIT7 EXCEPTION HANDLING** Definition of exception handling	1-3	Revision
	2	Implementation of keywords like try		
	3	Catch,finally		
15th	**1**	Throw & Throws	1-3	Revision
	2	Importance of exception handling in practical implementation of live projects		
	3	**REVISION**		
16th	**1**	**TEST**	1-3	Revision
	2	**REVISION**		
	3	**REVISION**		

Lesson Plan

Discipline	**Computer Engg.**
Semester	**6th**
Subject	**Entrepreneurship Development and Management**
Lecture per Week	**3**
Lesson plan Duration	**15 weeks**

Week	Lecture Day	Topic (including assignment / test)	Delivery Date of Lecture	Remark
1st	**SECTION - A**	**Unit-1-Introduction:**		
	1st	Introduction		
	2nd	Introduction/ Syllabus		
2nd	1st	Concept/Meaning and its need		
	2nd	Sole proprietorship and partnership forms and other forms of business organisations		
	3rd	Schemes of assistance by entrepreneurial support agencies at National, State, District – level, organisation: NSIC, NRDC,		
3rd	1st	DC, MSME, SIDBI, NABARD, NIESBUD, HARDICON Ltd.		
	2nd	Commercial Banks, SFC's TCO, KVIB, DIC,		
	3rd	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks		
4th	**Unit-2 - Market Survey and Opportunity Identification/Ideation**			
	1st	Scanning of the business environment		
	2nd	Salient features of National and Haryana State industrial policies and resultant business opportunities		
	3rd	Types and conduct of market survey		
5th	1st	Assessment of demand and supply in potential areas of growth		
	2nd	Identifying business opportunity, Considerations in product selection		
	3rd	Converting an idea into a business opportunity		
6th	**1st Sessional Test**			
	Unit-3- Project Report Prepration			
	1st	Detailed project report including technical, economic and market feasibility , Common errors in project report preparations		
	2nd	Exercises on preparation of project report,Sample project report		
7th	**SECTION -B**	**Unit-4 Construction Labour**		
	1st	Introduction to Management, Definitions and importance of management		
	2nd	Functions of management: Importance and process of planning, organising, staffing, directing and controlling		
	3rd	Principles of management (Henri Fayol, F.W. Taylor),Concept and structure of an organisation		
8th	1st	Types of industrial organisations and their advantages,Line organisation		
	2nd	Staff organisation,Line and staff organisation.		

	3rd	Functional Organisation		
9th	**Unit-5 -Leadership and Motivation**			
	1st	**a) Leadership :** Definition and Need,Qualities and functions of a leader,Manager Vs leader		
	2nd	Types of leadership,Case studies of great leaders		
	3rd	**b) Motivation :** Definition and characteristics, Importance of self motivation, Factors affecting motivation		
10th	1st	Theories of motivation (Maslow, Herzberg, Douglas, McGregor)		
	Unit-6 - Management Scope in Different Area			
	2nd	**a) Human Resource Management :** Introduction and objective, Introduction to Man power planning, recruitment and selection, Introduction to performance appraisal methods		
	3rd	**b) Material and Store Management :** Introduction functions, and objectives,ABC Analysis and EOQ		
11 th	1st	c) Marketing and sales : Introduction, importance, and its functions,Physical distribution,Introduction to promotion mix,Sales promotion		
	2nd	**d) Financial Management :** Introductions, importance and its functions, knowledge of income tax, sales tax, excise duty, custom duty, VAT, GST		
	2nd Sessional Test			
12th	**Unit-7 - Work Culture**			
	1st	Introduction and importance of Healthy Work Culture in organization		
	2nd	Components of Culture, Importance of attitude, values and behaviour Behavioural		
	3rd	Science – Individual and group behavior.		
13th	1st	Professional ethics – Concept and need of Professional Ethics and human values.		
	Unit-8 - Basic of Accounting and Finance			
	2nd	**a) Basic of Accounting: -** Meaning and definition of accounting,		
	3rd	Double entry system of book keeping		
14th	1st	Trading account		
	2nd	PLA account and balance sheet of a company		
	3rd	**b) Objectives of Financial Management -** Profit Maximization v/s Wealth Maximization		
	Unit- 9 Miscellaneous Topics			
15th	1st	**a) Total Quality Management (TQM)** Statistical process control, Total employees Involvement		
	2nd	**b) Intellectual Property Right (IPR)** Introduction, definition and its importance		
	3rd	Infringement related to patents, Just in time (JIT)		
16th	1st	Copy right,		
	2nd	Trade mark		
	3rd Sessional Test			

Lesson Plan

Discipline: Computer Engineering Semester**:** IV

Subject: DATA STRUCTURES USING 'C'

Lesson Plan Duration: 15 weeks

Work Load (Lecture/ Practical) per week (in hours): L- 03, P - 04 + 04

Week	Theory	Practical
1st	L-1 Introduction to data Structure (Linear, Non-Linear, Primitive, Non-Primitive, Contiguous, Non-contiguous datastructures)	[P-1] Operations on Arrays (Traversing, insertion, deletion)
	L-2 Problem solving concept, top down and bottom- up design	[P-17] Operations on Arrays (Searching- Linear Search)
	L-3 Structured programming concepts	
2nd	L-4 Concept of data types, variables, constants. concept ofdata- information	[P-16] Operations on Arrays (Searching- Binary Search)
	L-5 Concept of pointer variables and constants. Arrays andpointers, pointers to structures.	[P-2] The addition of two matrices using functions
	L-6 Concept of Arrays: Single dimensional array Two-dimensional array	
3rd	L-7 Representation of Two-dimensional Array (BaseAddress, LB, UB)	[P-3] The multiplication of two matrices using function
	L-8 Storage representation of multi-dimensional arrays(Row major, column major order)	[P-*] Creation of arrays using dynamic memoryallocation
	L-9 Operations on Arrays (Traversing, Insertion, Deletion)	
4th	L-10 Operations on Arrays (Searching – Linear Search)	[P-*] Creation of structures using dynamic memoryallocation
	L-11 Operations on Arrays (Searching – Binary Search)	[P-7] Creation of linked lists using static and dynamicmemory allocation
	L-12 Introduction to linked list. Representation of linkedlists in Memory, Comparison between Linked List and Array	
5th	**L-13,14 Ist sessional**	**Ist sessional**
	L-15 Traversing a linked list Searching an item in a linkedlist	[P-7] Insertion of elements in linked list at the beginning,at the last and at the desired location
6th	L-16 Insertion and deletion into linked list (At first Node,Specified Position, Last node Application of linked lists	[P-7] Deletion of an item from a linked list
	L-17 Doubly linked lists Traversing a doubly linked listsInsertion and deletion into doubly linked lists	
	L-18 Applications of linked lists. Stacks, queues	[P-8] Insertion of elements in Doubly linked list at thedesired location
7th	L-19 Introduction to stacks. Representation of stacks witharray and Linked Lists	[P-8] Deletion of an item from Doubly linked list
	L-20 Application of stacks-Postfix expression evaluation	
	L-21 Transforming infix expression into postfix expression	[P-4] Push and Pop operations in stacks using linked lists.
8th	L-22 Quick Sort	[P-4] Push and Pop operations in stacks using Arrays
	L-23 Concept and Comparison between recursion andIteration factorial of a no with and without recursion	[P-5] Inserting and deleting elements in queue usingarrays.
	L-24 Fobonacii series problem using recursion and withoutrecursion	
9th	L-25 Solving Tower of Hanoi problem using recursion andwithout recursion	[P-5] Inserting and deleting elements in queue usinglinked lists
	L-26 Introduction to Queues Implementation of Queuesusing arrays	

	L-27 Implementation of Queues using linked lists	[P-6] Inserting and deleting elements in circular queueusing arrays.
10th	L-28 Circular Queues, De-queues, Application of Queues	[P-6] Inserting and deleting elements in circular queueusing linked lists.
	L-29,30 IInd sessional	**IInd sessional**
11th	L-31 Concept of Trees	[P-9] The Factorial of a given number with recursion andwithout recursion
	L-32 Representation of Binary tree in memory	[P-10] Fibonacii series with recursion and withoutrecursion

Week	Theory	Practical
12th	L-34 In order Traversal (Non-recursive)	[P-11] Program for binary search tree operation-inserting/deleting a node into a binary search tree
	L-35 Post order Traversal (Non-recursive)	[P-11] Program for binary search tree operation-preorder, inorder, post order traversal
	L-36 Concept of Binary Search Trees (BST)	
13th	L-37 Searching and Inserting nodes into BSTs	[P-12] The selection sort technique
	L-38 Deleting a node from a BST	[P-13] The bubble sort technique
	L-39 Introduction to Heap	
14th	L-40 How to insert Item into a Heap	[P-14] The quick sort technique
	L-41 How to delete an Item from a Heap & Heapsort	[P-14] The quick sort technique
	L-42 Selection sort	
15th	L-43 Insertion Sort	[P-15] The merge sort technique
	L-44 Merging	[P-15] The merge sort technique
	L-45 Merge Sort	
16th	L-46 Revision	IIIrd Sessional
	L-47-48 IIIrd Sessional	Revision
11th	L-33 Preorder Traversal (Non-recursive)	[P-10] Fibonacii series with recursion and withoutrecursion

.Discipline : Computer Engg.

Semester : 4th

Subject : Project

Lesson plan duration : 15 weeks

Week	Practical	
	Practical Day	Topic
1st Week	1st	Selection of Project
	2nd	Selection of Project
Week 2	1st	Finalization of Project
	2nd	Finalization of Project
Week 3	1st	Outline of Project
	2nd	Outline of Project
Week 4	1st	Planning of Project
	2nd	Planning of Project
Week 5	1st	Execution of Project
	2nd	Execution of Project
Week 6	1st	Execution of Project
	2nd	Execution of Project
Week 7	1st	Execution of Project
	2nd	Execution of Project
Week 8	1st	Execution of Project
	2nd	Execution of Project
Week 9	1st -G	Execution of Project
	2nd	Execution of Project
Week 10	1st	Providing Solution of Problems
	2nd	Providing Solution of Problems
Week 11	1st	Production of Final Executed project
	2nd	Production of Final Executed project
Week 12	1st	Checking of Final Project
	2nd	Checking of Final Project
Week 13		

	1st	Report writing
	2nd	Report writing
Week 14	1st	Seminar
	2nd	Seminar
Week 15	1st	Viva-Voce
	2nd	Viva-Voce

Lesson Plan

Discipline : Computer Engineering
Semester : 2nd
Subject : Multimedia Applications
Lesson Plan Duration : 15 weeks
Work Load (Lecture) per week (in hours): Lectures-02 and Lab-02

Week	Theory		
	Lecture day	**Topic (including assignment / test)**	**Practical's**
1st	**1st**	Introduction to Multimedia System; Components and tools of multimedia	Study of Adobe Flash Tool
	2nd	Applications of Multimedia	
2nd	**3rd**	Multimedia file audio/video format; Media, File Format and types of media files	Frame by Frame Animation
	4th	Basic Multimedia hardware and software requirements. Quality, criteria and specification of hardware component	
3rd	**5th**	Difference between Analog and Digital Signal	Motion Tweening
	6th	Modulation and Digital Recording; Search of Digital Recording by converting sound into numbers	
4th	**7th**	Sound Card Connection, History of Sound Card. Types of Sound Card; Area of computer to use sound card, advantages of external sound card	Shape Tweening
	8th	Function of Playback and recording, MIDI, Components of MIDI, MIDI Connectors, Features and working of MIDI	
5th	**9th**	Revision	Practice
	10th	Sessional 1	
6th	**11th**	Hardware Requirement for text	Single Layer Masking
	12th	Software Requirement for text	
	13th	Coloring of Text	Double Layer

7th	**14th**	Fundamental Image Processing Steps	Masking
8th	**15th**	Types of Image Processing	Adding Video Clips
	16th	Digital Image Editing	
9th	**17th**	Class Test	Movie Clip, Buttons
	18th	Animation Techniques	
10th	**19th**	Revision	Practice
	20th	Sessional 2	
11th	**21st**	Digital Video fundamentals	Publishing of Flash Movie
	22nd	Relationship between pixel and video bitrate	
12th	**23rd**	Steps to create high quality video	Study of Adobe Photoshop Tools
	24th	Digital Video Production Techniques	
13th	**25th**	Revision	Image Editing in Photoshop
	26th	Authoring Tools and their features	
14th	**27th**	Classification of Authorizing Tools	Applying Special Effects
	28th	Multimedia Project Planning and Costing	
15th	**29th**	Multimedia team	Practice
	30th	Sessional 3	