Lesson Plan (4th Semester)

Name of Faculty : **Ms. Pujjwal Mittal**
Designation : **Lecturer**
Discipline : **Common with Civil,Computer,Electrical ,Mech**
Semester : **4th**
Subject : **English & Communication Skills-II**
Lesson Plan Duration: **15 Weeks (from February 2024 to June 2024)**
Work Load(Lecture/Practical)per week(In hours): 02-Lectures / 02-Practicals

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/Test)	Pract. Day	Topic
1st	1st	**UNIT I Reading** All The World's A Stage – W. Shakespeare	1	**Reading:-** Reading Practice of the above lessons in the Lab Activity classes.
	2nd	• Life Sketch of Dr. Abdul Kalam • The Portrait of a Lady - Khushwant Singh	2	Comprehension exercises of unseen passages along with the given lessons.
2nd	1st	The Doctor's Word by R K Narayan	3	Vocabulary enrichment and grammar exercises based on the above selective readings..
	2nd	Speech by Dr Kiran Bedi at IIM Indore2007 Leadership Concepts	4	Situational Conversation: Requesting and responding to requests; Expressing sympathy and condolence.
3rd	1st	The Bet - by Anton Chekov	5	Warning; Asking and giving information.
	2nd	**Revision**	6	
4th	1st	**UNIT -II Effective Communication Skills** Modern means of Communication (Video Conferencing, e- mail, Teleconferencing)	7	
	2nd	Effective Communication Skills: 7 C's of Communication	8	Getting and giving permission.
5th	1st	Non-verbal Communication – Significance, Types and Techniques for Effective Communication	9	Asking for and giving opinions.

	2nd	Barriers and Effectiveness in Listening Skills	**10**	A small formal and informal speech.
6th	**1st**	Barriers and Effectiveness in Speaking Skills	11	Seminar
	2nd	**Revision/Test**	**12**	Debate
7th	**1st**	**UNIT III, Professional Writing**	13	Practice
	2nd	• Correspondence: Enquiry letters, placing orders, complaint letters • Report Writing	14	Practice
8th	**1st**	• Memos • Circulars	**15**	Unseen Comprehension Passages and vocabulary enhancement.
	2nd	• Press Release • Inspection Notes and tips for Note-taking	16	Interview Skills: Preparing for the Interview and guidelines for success in the Interview and significance of acceptable body-language during the Interview.
9th	**1st**	• Corrigendum writing • Cover Letter	**17**	Written and Oral Drills will be undertaken in the class to facilitate holistic linguistic competency among learners.
	2nd	Drawing inferences	18	Participation in a GD, Functional and Non-functional roles in GD, case studies and role plays.
10th	**1st**	**Revision/Assignment**	**19**	Presentations, using audio-visual aids (including power-point).
	2nd	**UNIT IV. Grammar and Vocabulary** Prepositions	20	. Telephonic interviews, face to face interviews
11th	**1st**	Conjunctions	**21**	Presentations as Mode of Communication: Persuasive Presentations using multi-media aids
	2nd	Punctuation	22	Practice
12th	**1st**	• Idioms and Phrases • Pairs of words (Words commonly misused and confused)	**23**	Practice
	2nd	Translation of Administrative and Technical Terms in Hindi or Mother	24	Practice

		tongue		
13th	**1st**	**UNIT V Employability Skills.** Presentation Skills: How to prepare and deliver a good presentation	**24**	Practice
	2nd	Telephone Etiquettes	26	**Exercise**
14th	**1st**	• Importance of developing employable and soft skills • Resume Writing: Definition, Kinds of Resume, Difference between Bio-data and Curriculum Vitae and Preparing a Resume for Job/ Internship	**27**	**Exercise**
	2nd	• Group discussions: Concept and fundamentals of GD, and learning Group Dynamics. • Case Studies and Role Plays	28	**Exercise**
15th	**1st**	**Revision**	**29**	**Exercise**
	2nd	**Test**	**30**	**Exercise**

Lesson Plan

Name of Faculty : **Er. Harpal Singh**
Discipline : **Computer Engg**
Semester : **4TH**
Subject : **Data Structure Using C**
Subject Code : **220842**
Lesson Plan Duration : **15 Weeks (From Feb 2024 to June 2024)Lecture-03, Practical-04**

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Pr Day	Topic
1st	1st **(Unit-1)**	**Fundamental Notations:-** Problem solving concept, top down and bottom up design, structured programming	1	Sorting an array implementation
	2nd	Concept of data types, variables and constants		
	3rd	Concept of pointer variables and constants,	2	
2nd	4th	Revision	3	Addition of two matrices using functions
	5th **(Unit-2)**	**Arrays and Linked Lists** Concept of Arrays,	4	
	6th	Single dimensional array		
3rd	7th	Two dimensional array	5	The multiplication of two matrices
	8th	Representation of Two dimensional Array (Base Address, LB, UB)		
	9th	Operation on arrays:-searching,	6	
4th	10th	traversing, ,	7	Push and pop operation in stack
	11th	Inserting		
	12th	deleting	8	
5th	13th	Introduction to linked list and double linked list	9	Inserting and deleting elements in queue
	14th	Representation of linked lists in Memory, Comparison between Linked List and Array		
	15th	Operations :-Traversing a linked list	10	

6th	16th	Searching linked list	11	Inserting and deleting elements in circular queue
	17th	Insertion and deletion into linked list (At first Node, Specified Position, Last)	12	
	18th	Application of linked lists		
7th	19th	Doubly linked lists	13	Insertion and deletion of elements in linked list
	20th	Traversing a doubly linked lists		
	21st	Insertion and deletion into doubly linked lists	14	
8th	22nd **(Unit-3)**	**Stacks, Queues and Recursion** Introduction to stacks, Representation of stacks with array and Linked List	15	Insertion and deletion of elements in doubly linked list
	23rd	Implementation of stacks	16	
	24th	Application of stacks: Polish Notations		
9th	25th	Converting Infix to Post Fix Notation	17	The Factorial of a given number with recursion and without recursion
	26th	Evaluation of Post Fix Notation, Tower of Hanoi		
	27th	Introduction to queues, Implementation of queues using array algorithm	18	
10th	28th	Implementation of queues using Linked List with algorithm	19	Fibonacii series with recursion and without recursion
	29th	Circular Queues		
	30th	De-queues, Application of Queues	20	
11th	31st	Recursion	21	Program for binary search tree operation
	32nd b **(Unit-4)**	**Trees** Concept of Binary Trees, Concept of representation of Binary Tree		
	33rd	Concept of balanced Binary Tree	22	
12th	34th	Traversing Binary Trees (Pre order, Post order and In order)	23	

	35th	Operations on BST:- Searching,		The selection sort technique The bubble sort technique
	36th	inserting in binary search trees, deleting in binary search trees	24	
13th	37th	Introduction to Heap	25	The quick sort technique The merge sort technique
	38th **(Unit-5)**	**Sorting and Searching -**Linear Search algorithm		
	39th	Binary Search algorithm	26	
14th	40th	Concept of sorting Bubble Sort	27	The binary search procedures to search an element in a given list
	41st	Insertion Sort		
	42nd	Quick Sort	28	
15th	43rd	Selection Sort	29	The linear search procedures to search an element in a given list
	44th	Merge Sort		
	45th	Heap Sort	30	

LESSON PLAN

Discipline	**Computer Engineering**	
Semester	**4th**	
Subject	**Computer Organisation**	
Duration	**15 WEEKS**	
Work Load	**Lectur**	**4**
Week	**Theory**	
	Day	**Topic**
1st		
	1st	General resister Computer organization and relevance of the studying the subject in Diploma level Program.
	2nd	CPU Organization : Concept of Registers and General Register Organization
	3rd	Concept of Stack Organization
	4th	Concept of Instruction Format and types of instructions, Three, Two, One , Zero Address
2nd	5th	Addressing modes: Immediate, register, direct, in direct,
	6th	Addressing modes: relative, indexed.
	7th	Concept of CPU Design
	8th	Concept of Micro programmed controlled
3rd	9th	Concept of Hard wired controlled
	10th	Class Test of CPU Design
	11th	Concept of Reduced instruction Set Computer
	12th	Concept of Complex instruction Set Computer
4th	13th	CISC Characteristics, RICS Characteristics
	14th	Comparision of RISC & CISC
	15th	Seminar on Topics , Instruction formats and Addressing modes , CISC, RICS
	16th	Concept of Memory Organization, Memory types
5th	17th	Memory Hierarchy
	18th	ROM and RAM Chips,Concept of Memory Address Map
	19th	Connections of Memory Chips with the CPU
	20th	Concept and usage of Auxiliary Memories and types
6th	21st	Study of Magnetic Disks
	22nd	Study of Magnetic Tapes.
	23rd	Associative and Cache memory
	24th	Concept of Virtual Memory
7th	25th	Concept of Memory Management
	26th	Memory Management Hardware.
	27th	Revision of Associative, Cache , Virtual memory
	28th	Read operation of memory
8th	29th	Write operation of memory
	30th	Read and Write operation of memory
	31st	introduction- Input/output Organization
	32nd	Concept of Input/output Organization
9th	33rd	Basic Input out put System BIOS
	34th	Basic Input out put System BIOS Function
	35th	Testing and Initialization by BIOS, Configuring the System
	36th	Configuring the System
10th	37th	Concept of Data transfer in Computer System
	38th	Different modes of Data Transfer : Programmed I/O
	39th	Programmed I/O : Synchronous
	40th	Programmed I/O : Asynchronous
11th	41st	Interrupt initiated I/O
	42nd	DMA data transfer
	43rd	Revision of Previous lectures
	44th	**Class Test od I/O Organisation**
12th	45th	introduction- Multi Processor Systems
	46th	Concept of Multi Processor Systems
	47th	Different forms of Parallel Processing
	48th	Revision of Previous lectures
13th	49th	Concept of Parallel processing and Pipe Lines
	50th	Concept of Parallel processing and Pipe Lines
	51st	Revision of Previous lectures
	52nd	Class Test
14th	53rd	Basic Characteristics of Multiprocessor, General purpose multiprocessors.
	54th	Concept of Interconnection Networks, Concept of Time Shared Common Bus
	55th	Concept of Multiport Memory, Cross Bar Switch
	56th	Multistage Switching networks and hyper cube structures
15th	57th	Define I/O Interface, methods of Asynchronous data transfer
	58th	Synchronous data transfer, Strobe control,
	59th	Handshaking
	60th	Describe Asynchronous Serial Transfer

LESSON PLAN

NAME OF FACULTY: DIVYA

DISCIPLINE: COMPUTER ENGINEERING

SEMESTER: IV

SUBJECT: OBJECT ORIENTED PROGRAMMING USING JAVA

LESSON PLAN DURATION: 15 WEEKS

WORK LOAD LECTURE PER WEEK: 2 LECTURES/4 PRACTICALS

Wee	Lecture	Topics	Practicals
1st	1	UNIT I Introduction of Features	1. Write a program in JAVA to print "Hello" using classes.
	2	Fundamentals of object oriented programming – procedure oriented programming	
2nd	3	Vs. object oriented programming (OOP) Object oriented programming concepts – Classes,object,	2. Write a program to input using Scanner Class.
	4	object reference, abstraction, encapsulation, inheritance and polymorphism	
3rd	5	Introduction of eclipse (IDE) for developing programs in Java.	3. Write a program to print factorial of a Number.
	6	UNIT II. Language Constructs, Classes and objects	
4th	7	Review of constructs of C used in JAVA : variables,	4. Write a program to create a Class and make objects of that class.
	8	types and type declarations,	
5th	9	data types,	Copy checking/Revision
	10	increment and decrement operators,	
6th	11	relational and logical operators; if then else clause;	5. Create a class with data members Feet, Inches and add them.
	12	conditional expressions,	
7th	13	input using scanner class and output statement,	6. Create a class using constructors.
	14	loops, switch case, arrays, methods. Creation, accessing class member.	
8th	15	Revision	7. Create a class and use of Single inheritance.
	16	1ST sessional	
9th	17	UNIT III Inheritance and Polymorphism	8. Create a class and show the use of multiple inheritance.
	18	Definition of inheritance, protected data, private data, public data, constructor chaining,	
10th	19	order of invocation, types of inheritance,	Copy checking/Revision

	20	single inheritance, multilevel inheritance, hierarchical inheritance, hybrid inheritance	
11th	21	Method & constructor overloading, method overriding, up-casting and down-casting.	9. Create a class and use of Multi-level inheritance.
	22	UNIT IV Abstract class & Interface	
12th	23	Key points of Abstract class & interface, difference between an abstract class & interface,	10. Create a class showing the use of Constructor Overloading.
	24	implementation of multiple inheritance through interface.	
13th	25	Revision	11. Create a program showing the use of Interfaces.
	26	2ND sessional	
14th	27	UNIT V Exception Handling	12. Create a progran Try and Catch Block.
	28	Definition of exception handling, implementation of keywords like try, catch, finally, throw &throws.	
15th	29	Importance of exception handling in practical implementation of live projects.	Copy checking/ Revision
	30	3RD sessional	

Gyan Ganga Polytechnic, Heenga Kheri

Lesson-Plan

NameofFaculty	Er. Harpal Singh
Discipline	Computer Engineering/Civil Engg
Semester	4th
Subject	MOOCS Elective (E-COMMERCE Technologies)

Week	Day	TheoryTopic/Assignment/Test
1st	1	Introductionto ELECTRONIC COMMERCE(E-Commerce)
	2	Categories and Frame-work of E-Commerce
2nd	1	Advantages & Disadvantages of E-Commerce, Types of E-Commerce
	2	Threats and Features of E-Commerce
3rd	1	Concept of Business Model of E-Commerce and E-Governance
	2	Different Types of Networking For E-Commerce: Concept of Internet with its applications
4th	1	Concept of Wireless Application Protocol
	2	Anatomy of Convergence: Technological Convergence
5th	1	Technology Implications and Collaborative Product Development
	2	Concept of Content Management System, Web Traffic and Content Marketing
6th	1	Concept of Supply Chain Management: Introduction, Features and Components, Advantages and Disadvantages
	2	Introduction about E-Payment Systems, Types of E-Payment Systems
7th	1	E-cash System and Electronic Checks
	2	Concept of Smart Cards & Electronic Payment Systems
8th	1	Discussion of Electronic Payments Issues
	2	Introduction of Electronic Data Interchange(EDI)
9th	1	Layered Architecture of EDI and its Applications
	2	Concept of EDI Protocols
10th	1	Discussion about E-Marketing and Tele-Marketing
	2	Security Threats of E-Commerce
11th	1	Security Requirements of E-Commerce
	2	Security Policies for E-Commerce
12th	1	Concept of Enterprise Resource Planning (ERP)
	2	Functional areas and Benefits of ERP
13th	1	Business Modules in ERP: Finance, Investment Management, Plant Maintenance
	2	Business Modules in ERP: Quality Management, Materials Management
14th	1	Introduction of Enterprise application integration (EAI)
	2	Advantages and Disadvantages of EAI