

BHAI GURDAS INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Applied Sciences

LESSON PLAN

Subject Name: Programming for Problem Solving

Subject Code: - BTPS101-18

Year: - FEB 2023

Semester: - 2ND

Lecture No.	Unit	Date/ Week	Topic	Teaching Aids	References
L-1	Unit-1	Week	Introduction to Programming, Components of Computer System	PPT	Dr. S Anandamurgan
L-2			Working of Operating System, Execution and structure of C program	Choke and Duster	Book
L-3			Introduction to Flowchart, guidelines for drawing a Flowchart, Compilation process during program execution	Choke and Duster	Dr. S Anandamurgan
L-4			Use and working of algorithms in C Language,	Choke and Duster	Dr. S Anandamurgan
L-5		Week	Character set of C, Use of literals in C	PPT	Book
L-6			Differentiate between compilers & interpreters	PPT	
L-7			Syntax and logical errors in compilation,	PPT	Internet
L-8			Variable declaration and its types	Choke and Duster	Book
L-9		Week	Variable declaration Programs	Choke and Duster	Vipan Arora
L-10			Introduction about operators, and its types	Choke and Duster	Vipan Arora
L-11			Literals or constants	Choke and Duster	Vipan Arora
L-12	UNIT-2		Introduction about Input/ Output statements	PPT	Book
L-13		Week	Unformatted I/O functions,	Choke and Duster	Book
L-14			Character I/O functions	Choke and Duster	Book
L-15			Use of Type Casting in C	Choke and Duster	Book
L-16			Library Functions, Use of expressions	Choke and Duster	Vipan Arora
L-17			Practice of running simple	PPT	Dr. S

			programs(addition, subtraction, multiply) 2 numbers		Anandamurgan
L-18		Week	Introduction about Control Statements and their uses	Choke and Duster	Book
L-19			Sequential statements,	PPT	Vipan Arora
L-20			Selection or branching statements	PPT	Dr. S Anandamurgan
L-21		Week	Iteration or looping statements	PPT	Dr. S Anandamurgan
L-22			Programming practice	LAPTOP	Vipan Arora
L-23	UNIT-3		Introduction and elements of array, WAP to demonstrate use of an array	Choke and Duster	Book
L-24			Initialization and working of 1-D array,2-D Array	Choke and Duster	Book
L-25		Week	Character Arrays, Declaring and initializing string variables	Choke and Duster	Book
L-26			Array programming practice	LAPTOP	Internet
L-27	UNIT-4		Introduction about searching and sorting algorithms	Choke and Duster	Book
L-28			Working of Bubble Sort, Insertion Sort, Selection Sort	Choke and Duster	Book
L-29		Week	Programming Practice	LAPTOP	Internet
L-30			Differentiate between Bubble, Insertion and Selection sort	Choke and Duster	Book
L-31	UNIT-5		Differentiate between local, global and static variables, Run various programs using function	Choke and Duster	Dr. S Anandamurgan
L-32			Passing parameters to a function, Call by reference, call by value	PPT	Dr. S Anandamurgan
L-33	UNIT-6	Week	Introduction about recursion	PPT	Notes
L-34			Wap to find factorial of a number, sum of given numbers using recursion	PPT	Vipan Arora
L-35			Programming based on Simple functions	LAPTOP	Dr. S Anandamurgan
L-36			Programming based on Call by Reference and call by value	PPT	Internet
L-37		Week	Differentiate between quick and merge sort	PPT	Internet
L-38	UNIT-7		Defining a structure, initialization of structure	Choke and Duster	Book
L-39			Pointer to structure, nested structure with program	PPT	Internet
L-40			Array of structure, Initialization of array of structure Union,	Choke and Duster	Book

L-41			Differentiate between structure and union	Choke and Duster	Book
L-42			Program based on structure	LAPTOP	Dr. S Anandamurgan
L-43	UNIT-8		Use of pointers in C, Pointers and Arrays	PPT	Vipan Arora
L-44			Pointers to functions, Differentiate between array and pointer	PPT	Notes
L-45			Practice on Pointer Programs	LAPTOP	Book
L-46	UNIT-9		Study various data files, Defining and opening a file, reading from a file, writing to a file	Choke and Duster	Dr. S Anandamurgan
L-47			Programs based on reading and writing on a file.	LAPTOP	Vipan Arora
L-48			Error handlings in file.	PPT	Dr. S Anandamurgan
L-49			Structure of file program,	PPT	Notes
L-50			Command Line Arguments	PPT	Notes
L-51			String Input / Output functions, printing a file	Choke and Duster	Book
L-52			Programs based on making a file	LAPTOP	Book