

## Lesson Plan

**Name of the Faculty** : Ms. Gurpreet Bansal (ASSTT. PROFESSOR)  
**Discipline** : BCA  
**Semester** : 2ND  
**Subject** : Programming in C (BCA-104 B) & BCA-124B  
**Lesson Plan Duration** : 15 weeks (from January, 2018 to April, 2018)

**Work Load (Lecture/Practical) per week (in hours):**Lecture: 3, Practical:2

Week	Theory		Practical	
	Lecture Day	Topic(including Assignment/Test)	Practical Day	Topic
1st	1 <sup>st</sup>	Problem analysis, need for programmed languages, introduction to algorithms	1 <sup>st</sup>	Simple Algorithms
	2 <sup>nd</sup>	Flow charts and decision tables, structured programming and modular programming	2 <sup>nd</sup>	Simple Flowcharts, Decision Tables  Simple C Programs
	3 <sup>rd</sup>	C character set, identifiers and keywords, Data types: declaration and definition,		
	T1	Tutorial---review of lectures		
2nd	4 <sup>th</sup>	Type conversion, Types of error,	3 <sup>rd</sup>	Programs to Implement Type Conversion
	5 <sup>th</sup>	Preprocessor directives, 'C' macro and macro vs function.	4 <sup>th</sup>	Programs to Implement Preprocessor Directives
	6 <sup>th</sup>	Assignment on above topics/ Test 1		
	T2	Tutorial---problem/review of lectures		
3rd	7 <sup>th</sup>	Unformatted & formatted I/O function in C	5 <sup>th</sup>	Programs to Implement Input Output functions
	8 <sup>th</sup>	Input Functions	6 <sup>th</sup>	Programs to Implement Input Output functions
	9 <sup>th</sup>	Output Functions		
	T3	Tutorial---problem/ review of lectures		
4th	10 <sup>th</sup>	Operators	7 <sup>th</sup>	Programs to

				Implement Operators
	11 <sup>th</sup>	Operators	8 <sup>th</sup>	Programs to Implement Operators
	12 <sup>th</sup>	Assignment on above topics/ Test 2		
	T4	Tutorial---problem/review of lectures		
5th	13 <sup>th</sup>	Conditional Constructs	9 <sup>th</sup>	Programs to Implement Conditional Constructs
	14 <sup>th</sup>	Looping Constructs	10 <sup>th</sup>	Programs to Implement Looping Constructs.  Program to implement Simple functions, Recursion & Library functions
	15 <sup>th</sup>	Function Definition, prototypes Passing parameters, recursion, Standard library/user-defined functions.		
	T5	Tutorial---problem/review of lectures		
6th	16 <sup>th</sup>	Introduction to arrays: Defining and processing an array, 1-Dim Arrays, 2 Dim Arrays	11 <sup>th</sup>	Program to implement 1-dim and 2-dim arrays
	17 <sup>th</sup>	Passing arrays to functions	12 <sup>th</sup>	Program to implement arrays to functions
	18 <sup>th</sup>	Assignment on above topics/ Test 3		
7th	19 <sup>th</sup>	Handling of character strings	13 <sup>th</sup>	Program to implement strings
	20 <sup>th</sup>	Intro to Pointers : Declaration, operations on pointers,	14 <sup>th</sup>	Program to implement Pointers
	21 <sup>st</sup>	Array of pointers, Pointers to arrays		
	T6	Tutorial---problem/review of lectures		
8th	22 <sup>nd</sup>	Pointer Arithmetic	15 <sup>th</sup>	Program to implement strings
	23 <sup>rd</sup>	Using Pointers to pass Parameters to Functions	16 <sup>th</sup>	Program to implement strings
	24 <sup>th</sup>	Assignment on above topics/ Test 4		
	T7	Tutorial---problem/review of lectures		
9th	25 <sup>th</sup>	Defining and processing a structure, user defined data type	17 <sup>th</sup>	Program to implement structures

	26 <sup>th</sup>	Structure and Pointers	18 <sup>th</sup>	Program to implement structures
	27 <sup>th</sup>	Nested structure,		
	T8	Tutorial---problem/review of lectures		
10th	28 <sup>th</sup>	Self-referential structures, unions.	19 <sup>th</sup>	Program to implement Unions
	29 <sup>th</sup>	Storage classes, automatic, external, and static variables.	20 <sup>th</sup>	Program to implement storage classes
	30 <sup>th</sup>	Assignment on above topics/ Test5		
	T9	Tutorial---problem/review of lectures		
11th	31 <sup>st</sup>	Data files:Opening, closing,	21 <sup>st</sup>	Program to implement File Handling
	32 <sup>nd</sup>	Creating, and processing Files	22 <sup>nd</sup>	Program to implement File Handling
	33 <sup>rd</sup>	Unformatted data field. File		
	T10	Tutorial---problem/review of lectures		
12th	34 <sup>th</sup>	File Management Functions	23 <sup>rd</sup>	Program to implement File Management Functions
	35 <sup>th</sup>	Sorting (Bubble sort)	24 <sup>th</sup>	Program to implement Sorting
	36 <sup>th</sup>	Selection sort		
	T11	Tutorial---problem/review of lectures		
13th	37 <sup>th</sup>	Searching (Linear Search)	25 <sup>th</sup>	Program to implement Searching
	38 <sup>th</sup>	Searching (Binary Search)	26 <sup>th</sup>	Program to implement Searching
	39 <sup>th</sup>	Assignment on above topics/ Test6		
	T12	Tutorial---problem/ review of lectures		
14th	40 <sup>th</sup>	Revision	27 <sup>th</sup>	Lab Assignments
	41 <sup>st</sup>	Revision	28 <sup>th</sup>	Lab Assignments
	42 <sup>nd</sup>	Problems & Revision		
15th	43 <sup>rd</sup>	Problem session	29 <sup>th</sup>	Lab Assignments
	44 <sup>th</sup>	Problem session	30 <sup>th</sup>	Lab Assignments
	45 <sup>th</sup>	Problem session		

#### IMPORTANT DATES (KEY DATES)

\* 14 to 16 February, 2018 (Wednesday -Friday)----- SESSIONAL I

\*4 - 6 April, 2018 (Wednesday - Friday) ----- SESSIONAL II

\*27 April, 2018 (Friday) ----- LAST DAY OF SESSION

\*1 May to 8 May, 2018 (Tuesday-Tuesday)----- PRACTICAL EXAMINATION

Start of End semester examinations (Even Semester)-----11 May, 2018 (Friday ) to 10 June, 2018 (Sunday)