



IDEAL INSTITUTE OF MANAGEMENT AND TECHNOLOGY
BCA

PROGRAMME: BCA

SEMESTER – I

ACADEMIC YEAR – Aug 2023-Jan 24

Course Code	Course Title	Course/ Lesson Planner	Lectures/Tutorials (55 Min. each)	Practicals (Per Week)	Credits
BCA102	PROGRAMMING USING C LANGUAGE	MS. RAKHI GANGAL	3+1	4	8
Marks Assessment Distribution	As per GGSIU University norms <ul style="list-style-type: none"> ➤ Continuous Assessment: 40 (Class Test + Assignments/ Class Presentations + Teachers' Assessment) ➤ End Term Examination: 60 				
Course Orientation/ Learning Objective	The objective of this course is to provide Understanding of the syntax and the semantics of C programming language and Building of logics for solving a given problem.				

TEXT BOOKS (T)

Sr No	Title	Author	Publisher Name
T1	Let us C	Yashwant Kanetkar	BPP Publications
T2	Programming in ANSI C	E. BalaGuruswamy	Tata McGraw-Hill
T3	Programming in C	Ashok N. Kamthane	Pearson Education

REFERENCE BOOKS (R)

DETAILED PLAN FOR LECTURES

Lecture No.	Unit/ Topic	Sub-Topic/ Lecture Description	Learning Outcomes	References/ Text Books/ Other Readings, Relevant Websites, Audio Visual Aids, software and Virtual Labs/ Self compiled instructional material	Pedagogical Tool Demonstration/ Case Study / Group Discussion/Power Point Presentation etc. Planned	Actual Date of Lecture and Signature of Faculty
1	UNIT - I	C basics: C character set, Identifiers and keywords, Data types, constant	Develop programming skills by learning the fundamentals of structured programming using C Language.	T2&R1	Lecture Method	22.09.2023
2,3	structure of basic C program, writing and executing the first C program #include Preprocessor directive symbolic constants, variable declarations	T2&R1		Lecture Method	25.09.2023 to 26.09.2023	
4,5	expression statements, compound statements operators: Arithmetic, Unary, Relational, logical, assignment, shorthand assignment	T2&R1		Lecture Method	3.10.2023- 5.10.2023	
6	Conditional and bitwise, comma operator. operators: Arithmetic	T2&R1		Lecture Method	6.10.2023	

7		C control structures: if statement, if...else statement else if ladder		T2&R1	Lecture Method	09.10.2023
8		Loops while, do...while, for loop		T2&R1	Lecture Method	10.10.2023
9		Switch statement, nested control structure, break, labelled break, continue, labelled continue statement, exit statement		T2&R1	Lecture Method	11.10.2023
10,11		C Functions: Functions: declaration, definition & scope,		T2&R1	Lecture Method	12.10.2023- 18.10.2023
12,13,14	UNIT - II	Recursion, call by value, call by reference. Preprocessor directive: #define, macros with arguments, nested macros, # and ## operators, Conditional compilation	Design and develop programs using arrays, storage classes, functions and to understand memory	T2&R1	Lecture Method	18.10.2023 20.10.2023(2)
15,16		Storage Classes: automatic, external (global), static & registers. Arrays(1D)		T2&R1	Lecture Method	25.10.2023- 30.10.2023
17,18		Arrays (2D) and strings pointers		T2&R1	Lecture Method	30.10.2023- 31.10.2023
19,20,21		Array & pointer relationship Pointer arithmetic, Dynamic memory allocation Pointer to arrays		T2&R1	Lecture Method	01.11.2023 (2) 03.11.2023
22,23		Array of pointers pointers to functions		T2&R1	Lecture Method	04.11.2023 7.11.2023

24		Array of pointers to functions.		T2&R1	Lecture Method	08.11.2023	
25	UNIT -III	Structures: Structures, unions, Enumeration, passing structure to functions, Arrays and Structures	Critically analyze real world problems using structures, unions and develop applications for handling text and binary files.	T2&R1	Lecture Method		
26,27		Difference between structure and union		T2&R1	Lecture Method	09.11.2023 10.11.2023	
28		Self-referential structure		T2&R1	Lecture Method	16.11.2023	
29		Bit fields.		T2&R1	Lecture Method	17.11.2023	
30		File handling [text (ASCII), binary]: file		T2&R1	Lecture Method	18.11.2023	
31		Input Output operations File access modes File pointers,		T2&R1	Lecture Method	20.11.2023	
32		file Positioning functions (fseek, ftell, rewind etc.)		T2&R1	Lecture Method	30.11.2023	
33,34	UNIT - IV	Standard library functions from stdio.h, stdlib.h, conio.h, ctype.h,		Explore the use of command line arguments, string manipulation and standard libraries.	T2&R1	Lecture Method	11.12.2023
35		math.h, string.h, process.h.,			T2&R1	Lecture Method	13.12.2023
36		Usage of command line arguments.			T2&R1	Lecture Method	13.12.2023

SCHEME FOR CONTINUOUS ASSESSMENT (CA):

Component	Weightage (%)
Class Test/ Internal Exam (Subjective)	15
Assignments/ Presentations	25

DETAILS OF ACADEMIC TASK(S)

Academic Task	Objective	Detail of Academic Task	Nature of Academic Task (group/individuals)	Academic Task Mode	Marks	Allotment / submission Date
Assignments	To enhance the analytical ability of students	Model Question Paper of 5 questions	Individual	Written Assignments	12.5	1 st Nov. 2023
Viva	To enhance the capacity of the students about the Subject.	Comprehensive viva	Individual	Viva	12.5	5 th Dec 2023
Class Test/ Internal Examination	To improve the answer writing skills of students.	Memory based test. Attempt any 3 questions out of 5 marks from Units- I and II.	Individual	Offline Subjective Paper	15	5 th Dec 2023

PLAN FOR TUTORIAL/ PRACTICAL: (Please do not use these time slots for syllabus coverage)

Tutorial/Practical No.	Topic	Type of pedagogical tool(s) planned
		Case Study/ Group Discussion/ Mock Trial/ Moot Court etc.) Or (case analysis, problem solving test, role play, business game etc.)
1.	Basic Programs	Practical Implementation
2.	Control Structure	Practical implementation
3.	Structure	Practical implementation

REMARKS BY ACADEMIC IN-CHARGE:

Good work, keep it up.

SIGNATURE

Rounder
20/12/24

REMARKS BY DIRECTOR:

Good

SIGNATURE

Rounder
20/12/24

Rounder

Ms. Rakhi Gangal