

Reg. No.:



W7513

Name:

University of Kerala

First Semester FYUGP Degree Examination, December 2025

Discipline Specific Core Course

COMPUTER SCIENCE

UK1DSCCSC101/ UK1DSCCAP101 - Programming using C / Problem Solving using C

Academic Level: 100-199

2024 Admission onwards

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

**Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark
Each.Answer all questions**

Qn No.	Question	CL	CO
1	List a rule for naming a variable in C.	RE	1
2	Recall the use of break statement	RE	2
3	Explain the features of an array.	UN	2
4	Give an example of declaring and defining a structure.	UN	4
5	Explain Algorithm.	UN	1
6	Interpret the purpose of free in dynamic memory allocation	UN	3

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Discuss Storage classes	UN	1
8	Explain the concept of file pointer and its role in file operations.	UN	4
9	Write a program to find the largest of three numbers	AP	2
10	Write the declaration of a function that returns the sum of two integers.	AP	3

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer.7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A)	AP	1, 1

Qn No.	Question	CL	CO
	Write an Algorithm and draw the flow chart to find the sum of even numbers upto 100. OR B) Interpret the role of algorithms and flowcharts in programming. Employ how you would use these tools to design a program that calculates the factorial of a number. Include a detailed algorithm and a corresponding flowchart.		
12	A) Explain string handling functions in C with examples OR B) Compare with example code for Structure and Union.	AN	2, 2
13	A) Assess the concept of dynamic memory allocation in C and justify the use and syntax of any three dynamic memory allocation functions. OR B) Write a C program to declare a structure for a student (with fields: name, roll number, and marks) and demonstrate how to access and modify the structure members.	EV	3, 3
14	A) Construct an array of structures in c with suitable example OR B) Write a C program snippet to demonstrate the use of the switch -case control structure.	CR	4, 4