



U8440

Reg. No.: .....

Name:.....



**University of Kerala**  
First Semester Degree Examination, November 2024  
Four Year Under Graduate Programme  
Discipline Specific Core Course  
**COMPUTER SCIENCE/COMPUTER APPLICATION**  
UK1DSCCAP101- Problem Solving using C/  
UKIDSCCSC101 – Programming using C  
Academic Level: 100-199

Time:1½Hours

Max.Marks:42

**Part A.**

**Answer All Questions, Objective Type. 1 Mark Each.**

**(Cognitive Level: Remember/Understand)**

**6 Marks. Time: 6 Minutes**

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
1.	Recall the use of an algorithm.	Remember	CO1
2.	Name the data types used to declare numerical data.	Remember	CO1
3.	Indicate the purpose of fscanf().	Understand	CO4
4.	Express 'for' loop using its correct syntax.	Understand	CO2
5.	What is the use of exit()?	Understand	CO2
6.	Identify any two features of pointers.	Understand	CO3

**Part B.**

**Answer All Questions , Short Answer. 2 Marks Each.**

**(Cognitive Level: Understand/Apply)**

**8 Marks. Time: 24 Minutes**

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
7.	Describe a 2D array with an example.	Understand	CO2
8.	Discuss about user-defined functions in C.	Understand	CO3
9.	Write a C program to demonstrate call by reference.	Apply	CO3
10.	Illustrate union in C language.	Apply	CO4

**Part C.**

**Answer all 4 Questions, choosing among options within each question.**

**Long Answer. 7 marks each.(Cognitive Level: Apply/Analyse/Evaluate/Create)**

**28 Marks. Time: 60 Minutes**

<b>Qn. No.</b>	<b>Question</b>	<b>Cognitive Level</b>	<b>Course Outcome (CO)</b>
11.	a. Demonstrate the structure of a C program using a program to find Simple Interest and explain the various sections. OR b. Illustrate the use of arithmetic operators in C using suitable examples and explain about operator precedence.	Apply	CO1
12.	a. Write a C program to check whether the input number is a palindrome or not. OR b. Write a C program to print the frequency of occurrence of a given character in an input string.	Apply	CO2
13.	a. Write a C program to print the elements of an array using functions. (Hint: array to be passed as parameter) OR b. Illustrate the concept of array of pointers using an example.	Apply	CO3
14.	a. Examine the concept of structure and array of structures in C language with suitable examples. OR b. Compare the file writing operation using write and append mode with examples. List out the differences in output.	Analyse	CO4