

2025

COMPUTER APPLICATION

Course Name : Introduction to C-Programming

Course Code : BCA-DSC-1014

Full Marks : 45

Time : 2 Hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions : 1x5=5
 - a) What is a token in C ?
 - b) Define an array.
 - c) What is the difference between = and == operators ?
 - d) What is a pointer ?
 - e) What is the purpose of fopen () function ?
2. Answer *any five* of the following questions : 2x5=10
 - a) Explain the difference between a compiler and an interpreter.
 - b) Write the syntax of for loop and explain its parts.
 - c) What is type casting in C ?
 - d) Explain the difference between call by value and call by reference.
 - e) What is dynamic memory allocation ? Mention any one function used for it.
 - f) What is a string in C ?
 - g) Write the syntax to open a file in write mode.
3. Answer *any four* of the following questions : 5x4=20
 - a) Explain different types of operators in C with examples.
 - b) Write a C program to find the largest of three numbers using if-else.
 - c) Describe the use of arrays in C. Write a program to find the sum of elements of an array.

(Turn over)

- d) Describe the use of pointers in arrays.
 - e) What are structures ? Explain how to declare and initialize a structure with an example.
 - f) Explain the difference between local and global variables with examples.
4. Answer *any one* of the following questions : 10x1=10
- a) Write a C program using functions and arrays to find the average of N numbers.
 - b) Explain in detail about dynamic memory allocation using malloc () and calloc () with examples.
 - c) Write and explain a program for reading and writing data to a file in C.

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