

# END TERM EXAMINATION

FIRST SEMESTER [BCA] FEBRUARY-MARCH 2023

Paper Code: BCA103

Subject: Programming Using in 'C' Language

Time: 3 Hours

Maximum Marks: 75

Note: Attempt five questions in all including Q.No.1 which is compulsory.  
Select one question from each unit.

- Q1 Answer the following: [5x5=25]
- a) What is the use of #define preprocessor?
  - b) Explain the usage of break, labelled break, continue & labelled continue statements?
  - c) Write example code to declare two-dimensional array.
  - d) Differentiate between Local and Global variable in C.
  - e) What is the difference between ++a and a++?

## UNIT-I

- Q2 Explain various types of operators used in C with example? [12.5]
- Q3
- a) What is recursion? Explain with the help of a program in C. [6]
  - b) Explain various looping statements in C with the help of suitable example. [6.5]

## UNIT-II

- Q4
- a) Differentiate between scanf() and gets() function with the help of an example? [6.5]
  - b) Explain the storage classes in C with example programs? [6]
- Q5
- a) What are the various dynamic memory allocation functions in C? Explain with an example. [6.5]
  - b) What is a pointer? Explain array of pointers to function with suitable example. [6]

## UNIT-III

- Q6
- a) Differentiate between formatted and unformatted input and output functions? [3.5]
  - b) Write short notes on: [3x3=9]
    - i) structure and Union
    - ii) passing structure to functions
    - iii) file access modes
- Q7
- a) What is the use of atoi() function? Explain with an example. [6]
  - b) Compare arrays and structures. Justify your comparison with an example. [6.5]

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P1/2

[ -2- ]

**UNIT-IV**

- Q8 a) Explain the syntax & usage of inbuilt string functions with suitable example? [7.5]  
b) Write a program to identify the largest and smallest word in a string. [5]
- Q9 a) Explain the following header files: [2.5x3=7.5]  
i) Math.h ii) stdlib.h iii) time.h  
b) Write a program in C to check whether the input word is a palindrome or not? [5]

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