

**Code No. : 1281**

**B. C. A. (First Semester)**

**Examination, 2022-23**

**PROGRAMMING IN C**

**(BCA-102T)**

*Time : Three Hours ]*

*[ Maximum Marks : 75*

**Note :** (i) All questions are compulsory.

(ii) Answer each part of the first question in not more than 100 words and the remaining questions in 800 words.

(iii) Marks are mentioned against the questions.

1. Answer each of the following questions : 3 each

- (a) Define the role of header files in C.
- (b) Discuss various string manipulation functions.
- (c) Define ternary operator. Find the largest number using ternary operator.

- (d) Discuss the advantages of union over structure.
- (e) Explain various modes of files in C.
- 2. (a) Define Array and its types. Write a program in C to input 5 integers in an array and find the sum of all the numbers. 15

*Or*

- (b) Define various control statements of C. Differentiate between switch-case control statement and if-else-if ladder.
- 3. (a) What are data types ? Explain its types. Differentiate between primitive and non-primitive data types. 15

*Or*

- (b) Define operators in C. Explain its types. What is operator precedence ?
- 4. (a) Define functions in C. Explain its types. Differentiate between call by value and call by reference. <https://www.csjmuonline.com> 15

*Or*

- (b) Discuss various types of user defined functions. Explain the difference between standard library functions and user defined functions.

**[3]**

5. (a) What are storage classes ? Differentiate between structure and array. Explain the role of pointers in C. 15

*Or*

- (b) Define structure. Explain its advantages. Discuss various types of functions used in file operations.