### H-100-21

Roll No.

## ANNUAL EXAMINATION, 2021

# B.C.A. I

### **B.C.A. 103**

#### Paper III

### (Programming in 'C' Language)

Time : 3 Hours]

[Maximum Marks : 80

**Note :** Attempt any two parts from each unit. All questions carry equal marks.

#### Unit-I

- **1.** (a) Explain basic structure of a C program with example.
  - (b) What is type casting ? Explain different types of type casting.
  - (c) Write short notes on the following :
    - (i) Data Type,
    - (ii) Constant,
    - (iii) Variable.

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### Unit-II

- (a) What is branching statement ? Explain various types of if-else statement with syntax and example.
- (b) Write difference between call by value and call by reference.
- (c) Write short notes on the following :
  - (i) Unconditional jump,
  - (ii) Exit function,
  - (iii) User defined function.

### Unit-III

- **3.** (a) What is Array ? Explain declaration, initialization and accessing elements of one and two dimension of numeric Array.
  - (b) Write difference between structure and union.
  - (c) Write a program to concatenate one string to another string without using library function.

### Unit-IV

- 4. (a) Explain Pointer Arithmetic with suitable example.
  - (b) Explain Dynamic memory allocation function with suitable example program.

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(c) Explain Declaration, Initialization of pointer to function with syntax and example.

### Unit-V

- 5. (a) What is file ? Explain file handling in C language.
  - (b) What is Macro? Explain parameterized and non-parameterized macro.
  - (c) Explain about fprint() and fscanf() function with suitable example.

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