

# DD—2855

## B.C.A. (Part I) Examination – 2021

Paper Fifth

PROGRAMMING IN 'C' LANGUAGE (OLD COURSE)

*Time: Three Hours*

*Maximum marks: 100*

*Minimum Pass Marks: 40*

**Note:** Attempt any two part from each question. All Question carry equal marks.

### UNIT - I

1. a. What do mean by operators in C language? Explain Logical, Relational and Conditional Operators in brief.
- b. Differentiate between formatted and unformatted IO? Explain getch(), getche(), getchar() functions with example.
- c. Write short notes on following:
  - i. if-else
  - ii. For loop
  - iii. Do while loop

### UNIT - II

2. a. What is an Array? Write a C program to add two matrix using two dimensional array.
- b. What is string in C language? Explain strcpy() strcmp() and strlen() functions with example.
- c. What is recursive function? Write a C program to find factorial of a given number using recursive function.

### UNIT - III

3. a. What is structure? Write a C program to print the details of a students like name roll\_number and class using structure.
- b. What is Union? How it is different from Structure? Explain with suitable example.
- c. Write short notes on following:
  - i. Enum
  - ii. Nested Structure

### UNIT - IV

4. a. What do you mean by pointer in C language? Write a C program to access the array elements using pointer.
- b. What is dynamic memory allocation? How it is implemented in C language using malloc() calloc() and realloc() function in C language? Explain with example.
- c. Write short notes on the following:
  - i. array of pointer
  - ii. Passing pointer to function
  - iii. Pointer to pointer

### UNIT - V

5. a. What is file pointer? Write a C program to read and write a file using file pointer.
- b. What do you mean by preprocessor? Explain #include, #define, #if, #elif#endif with suitable example.
- c. Explain the following file accessing functions with example:
  - i. fopen()
  - ii. fclose()
  - iii. fprintf()
  - iv. fscanf()
  - v. beof()