

Or

- (a) Write a C program to access two dimensional array any pointer.
- (b) What is Pointer ? How is it different from ordinary variable ? How is it initialized ? Explain by writing suitable 'C' program.

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G-1/609/22

Roll No.

I Semester Examination, January 2022

DCA

Paper III

(Programming in 'C' Language)

Time : 3 Hours]

[Max. Marks : 100

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

Unit-I

1. (a) What is header file ? How is it integrated in program ? Write name of any *four* header file used in 'C' language.
- (b) Write brief notes on the following :
- (i) Printf
- (ii) Scanf.

Or

- (a) Explain structure of 'C' program by writing a sample 'C' program. Also write some roles to construct 'C' statement.
- (b) What is data type ? Explain its types.

Unit-II

2. (a) What is operator precedence in 'C' ? Explain with example.
- (b) Explain different arithmetic operators by writing suitable 'C' program.

Or

- (a) Write a brief note on relation and logical operator.
- (b) Explain increment and decrement operator in detail. Explain your concept by suitable C program.

Unit-III

3. (a) What is Loop ? Explain different types of loops with suitable example.
- (b) Write a brief note on 'break' and 'continue' statement.

Or

- (a) Explain switch statement with suitable example.
- (b) What is String ? Explain any *four* string handling function with example.

Unit-IV

4. (a) What is Function ? Explain function calling technique with example.
- (b) Write difference between structure and Union.

Or

- (a) What is Recursion ? Write a 'C' program to calculate factorial of any given number using recursion.
- (b) Write a C program to explain the following concept :
- (i) Array within structure.
- (ii) Array of structure.

Unit-V

5. (a) Write a brief note on Pointer Arithmetic.
- (b) Write brief notes on the following :
- (i) Void pointer,
- (ii) Null pointer,
- (iii) Pointer to pointer.