



**MBO-003-2031002**

Seat No. 100916

**B. C. A. (Sem. I) (CBCS) (WEF-2019) Examination**

**February - 2021**

**Problem Solving Methodologies & Programming In C  
(New Course)**

**Faculty Code : 003**

**Subject Code : 2031002**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- 1 (A) Answer the Following. 4
- (1) C language was developed by \_\_\_\_\_.
  - (2) What is Variable?
  - (3) \_\_\_\_\_ is group of characters.
  - (4) What is Dry run?
- (B) Answer in Brief. 2
- (1) List out different tokens in C and explain any one in brief.
- (C) Answer in Brief. 3
- (1) Briefly explain structure of C program.
- (D) Answer in Detail. 5
- (1) List out different logic development techniques and explain flowchart with example.
- 2 (A) Answer the Following. 4
- (1) What is Constant?
  - (2) Relational operators are also known as \_\_\_\_\_ operators.
  - (3) List out different logical operators available in C.
  - (4) The range of Integer datatype is \_\_\_\_\_ to \_\_\_\_\_.
- (B) Answer in Brief. 2
- (1) Give difference between traditional C and Modern C.
- (C) Answer in Brief. 3
- (1) Briefly Explain pre-processor in C.
- (D) Answer in Detail. 5
- (1) Write note on datatypes in C.

- 3 (A) Answer the Following. 4
- (1) What is Loop?
  - (2) List out Ternary operators available in C.
  - (3) Write down syntax of While loop.
  - (4) In Goto statement the label is followed by \_\_\_\_\_.
- (B) Answer in Brief. 2
- (1) Explain Do...While loop with syntax and example.
- (C) Answer in Brief. 3
- (1) Explain If...Else with syntax and example.
- (D) Answer in Detail. 5
- (1) write note on different jumping statements.
- 4 (A) Answer the Following. 4
- (1) What is nested loop?
  - (2) Which type of value can be specified in switch statement?
  - (3) \_\_\_\_\_ is known as exit controlled loop in c.
  - (4) Write down syntax of For loop.
- (B) Answer in Brief. 2
- (1) Write a program that perform nested if.
- (C) Answer in Brief. 3
- (1) Give difference between Break and Continue Statement.
- (D) Answer in Brief. 5
- (1) Write note on switch case statement.
- 5 (A) Answer the Following. 4
- (1) What is Function?
  - (2) Write down use of atof().
  - (3) Writedown use of fabs().
  - (4) Which Library file must be included to perform string related functions.
- (B) Answer in Brief. 2
- (1) Explain getch() and getchar() with Example.
- (C) Answer in Brief. 3
- (1) Give difference between call by value and call by reference.
- (D) Answer in Detail. 5
- (1) Write note on different memory allocation functions.

- 6 (A) Answer the Following. 4
- (1) Writedown use of fflush().
  - (2) Write down syntax for calloc().
  - (3) \_\_\_\_\_ is used to return length of any given string.
  - (4) Writedown use of strcmp().
- (B) Answer in Brief. 2
- (1) Explain toupper() and tolower() with Example.
- (C) Answer in Brief. 3
- (1) Explain Recursion with suitable example.
- (D) Answer in Detail. 5
- (1) Explain different Storage classes in C.
- 7 (A) Answer the Following. 4
- (1) Write down use of exit().
  - (2) .(dot) operator can be used to access \_\_\_\_\_ of structure.
  - (3) Array can be initialized at \_\_\_\_\_ & \_\_\_\_\_.
  - (4) What is nested structure?
- (B) Answer in Brief. 2
- (1) Write note on String array.
- (C) Answer in Brief. 3
- (1) Write down code to get 5 elements from user and count how many are odd and how many are even.
- (D) Answer in Detail. 5
- (1) Explain Array with Matrix by suitable example.
- 8 (A) Answer the Following. 4
- (1) List out types of array.
  - (2) \_\_\_\_\_ keyword is used to create structure.
  - (3) Write down syntax for one dimension array.
  - (4) Array is \_\_\_\_\_ datatype.
- (B) Answer in Brief. 2
- (1) Give difference between structure and union.
- (C) Answer in Brief. 3
- (1) Explain Structure with UDF by Example.
- (D) Answer in Detail. 5
- (1) Write a program to get details of 5 students and print it using array of structure.

- 9 (A) Answer the Following. 4
- (1) Pointer can be declare using \_\_\_\_\_ operator.
  - (2) Pointer value means \_\_\_\_\_.
  - (3) What is datafile?
  - (4) Pointer is \_\_\_\_\_ datatype.
- (B) Answer in Brief. 2
- (1) Give difference between Text file and Binary file.
- (C) Answer in Brief. 3
- (1) Explain pointer to pointer with example.
- (D) Answer in Detail. 5
- (1) Write down program code to copy content of one file into another file.
- 10 (A) Objective Type Questions 4
- (1) To indicate end of the file \_\_\_\_\_ character can be used.
  - (2) Pointer to pointer variable must be declared using \_\_\_\_\_.
  - (3) \_\_\_\_\_ indicate number of arguments to be passed at command line argument.
  - (4) To Read data to the particular file , the file must be open in \_\_\_\_\_ mode.
- (B) Answer in Brief (Any 1 Out of 2) 2
- (1) Explain Poiner to Array with suitable example.
- (C) Answer in Detail (Any 1 Out of 2) 3
- (1) Explain Fseek() ,Ftell() and Rewind() with example.
- (D) Write note on (Any 1 Out of 2) 5
- (1) Explain Command Line Argument with Example.