



**JAP-003-003102**

Seat No. \_\_\_\_\_

**B. C. A. (Sem. I) (CBCS) Examination**

**November - 2019**

**CS - 02 : Problem Solving Methodologies and  
Programming in C  
(Old Course)**

**Faculty Code : 003**

**Subject Code : 003102**

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

[Total Marks : 70

**1 Answer the following : 20**

- (1) List out Memory Allocation Functions.
- (2) What is Array?
- (3) Give syntax for declaring a Union.
- (4) Array index starting from \_\_\_\_\_
- (5) Which operator is used to access a member element of structure?
- (6) What is pointer variable?
- (7) The standard C language comment is \_\_\_\_\_
- (8) The preprocessor directive #include is required if console output is used. (True/False)
- (9) The Operator << is called \_\_\_\_\_
- (10) What will the below sample produce when executed.

```
Void myFunc (int x)
{
    If(x>0)
    myFunc(++x);
    printf("%d",x)
}
Int main() {
    myFunc(5);
    return 0;
}
```

(11) What will the below sample produce when executed.

```
Int a = 15,b  
b = a++ + ++a;  
printf("%d, %d, %d, %d",b,a++,a,++a)
```

(12) C Language has been developed by \_\_\_\_\_

(13) What is Dry-run?

(14) What is type casting?

(15) What is the use of free()?

(16) What is Recursion?

(17) Which value return by strcmp() when both string is same?

(18) What is use of putw() function?

(19) Give syntax of fopen() function.

(20) argv stands for \_\_\_\_\_

**2 (A) Attempt Any Three : 6**

- (1) Explain c-character set.
- (2) Explain Pointer to Pointer.
- (3) Differentiate between: Array and Structure.
- (4) What is Flowchart?
- (5) What is the use of break & continue statement.
- (6) What is algorithm?

**(B) Attempt Any Three : 9**

- (1) Explain switch case statement with example.
- (2) Explain String arrays with example.
- (3) Explain Pointer within Array.
- (4) Explain gets() and puts() functions with example.
- (5) Explain fseek(), rewind(), fflush().
- (6) Give the difference between traditional and modern C.

- (C) Attempt Any **Two** : **10**
- (1) Explain else if ladder statement with example.
  - (2) What is user defined function? Explain Type of UDF.
  - (3) Write a program to copy the contents of one file into another.
  - (4) Explain Command line arguments with suitable example.
  - (5) Explain looping control statement with example.
- 3** (A) Attempt Any **Three** : **6**
- (1) Give the difference between call by value and call by reference.
  - (2) Explain difftime() function.
  - (3) Explain Symbols of Flowchart.
  - (4) Explain conditional ternary operator.
  - (5) Differentiate: Structure v/s Union
  - (6) List out file opening mode.
- (B) Attempt Any **Three** : **9**
- (1) Explain strcpy() and strcat() functions with example.
  - (2) Explain Variable naming rules.
  - (3) Explain Structure of C program
  - (4) Explain Nesting of loops with example.
  - (5) Explain rewind() function with suitable example.
  - (6) Explain Nested structures.
- (C) Attempt Any **Two** : **10**
- (1) Explain different Storage classes in C.
  - (2) Explain Single-Dimensional Array in detail with example.
  - (3) Explain All Operators in C Language.
  - (4) Explain Data types in C.
  - (5) Explain Pointers within Structure with suitable example.