

Total No. of Questions – [10]

G.R. No.

Total No. of Printed Pages: 2

paper code: V128-102CB (RE-FF)

MAY 2019 / END-SEM RE-EXAM

F. Y. B.TECH. (COMMON) (SEMESTER – II)

COURSE NAME: Computer Fundamentals (CB)

COURSE CODE: CS10182B - CB

(PATTERN 2018)

Time: [2 Hours]

[Max. Marks: 50]

(*) Instructions to candidates:

1) Attempt Q.1, Q.2, Q.3, Q.4 OR Q.5, Q.6 OR Q.7, Q.8 OR Q.9 and Q.10

2) Figures to the right indicate full marks.

3) Use of scientific calculator is allowed.

4) Use suitable data where ever required.

5) Q.10 is compulsory

Q1 a) Describe the flow chart with suitable symbols used for flowchart. [4]

OR

b) Write pseudocode and flowchart to Reverse a Number [4]

Q2 a) Difference between do-while and while loop with syntax and suitable example [4]

OR

b) State how many logical operators are there in c language? Enlist each with their Logical meaning? [4]

Q3 a) How to analyze program? Briefly explain analyzing parameters? Define sorting terms: Best case, Average case and Worst case [6]

OR

b) Find time complexity of given program : [6]

```
int main()
{
    int array[10], n, c, d, swap;
    printf("Enter number of elements\n");
    scanf("%d", &n);
    printf("Enter %d integers\n", n);
    for (c = 0; c < n; c++)
        scanf("%d", &array[c]);
    for (c = 0 ; c < n - 1; c++)
    {
        for (d = 0 ; d < n - c - 1; d++)
        {
            if (array[d] > array[d+1])
            {
                swap = array[d];
                array[d] = array[d+1];
                array[d+1] = swap;
            }
        }
    }
    printf("Sorted list in ascending order:\n");
    for (c = 0; c < n; c++)
        printf("%d\n", array[c]);
}
```

- Q.4 a) write a C program to swap two numbers using call by value and call by reference [6]
 b) Write advantages and limitations of Link list? [4]
- OR
- Q.5 a) What is recursion? Write recursive function to find out factorial of given number and explain with detail procedure [6]
 b) What is a Pointer? How a variable is declared to the pointer? [4]
- Q6 a) Explain Constructor and Destructor with example [6]
 b) Explain array of object with example [4]
- OR
- Q7 a) Explain features of Object oriented programming [6]
 b) Explain concept of Class and Object with example [4]
- Q8 a) Explain Inheritance? Explain what is visibility mode in inheritance? Explain types of inheritance? [6]
 b) Explain inline function in C++ with example [4]
- OR
- Q9 a) Compare function overloading and function overriding [6]
 b) Explain Scope resolution operator with example [4]
- Q.10 MCQ
- 1 How to access data members of a class? [1]
 - a) Dot operator
 - b) Arrow operator
 - c) Dot or arrow as required
 - d) Dot, arrow or direct call
 - 2 Which access specifier should be used so that all the parent class members can be inherited and accessed from outside the class? [1]
 - a) Private
 - b) Default or public
 - c) Protected or private
 - d) Public
 - 3 Destructors doesn't accept parameters. [1]
 - a) True
 - b) False
 - 4 Single level inheritance supports _____ inheritance. [1]
 - a) Run time
 - b) Compile time
 - c) Multiple inheritance
 - d) Language independency
 - 5 Multiple inheritance is _____ [1]
 - a) When a class is derived from another class
 - b) When a class is derived from two or more classes
 - c) When a class is derived from other two derived classes
 - d) When a class is derived from exactly one class
 - 6 It is _____ to redefine the virtual function in derived class? [1]
 - a) Necessary
 - b) Not necessary
 - c) Not acceptable
 - d) Good practice