

| Exam. | Back | | |
|-------------|----------------------|------------|--------|
| Level | BE | Full Marks | 80 |
| Programme | All (Except B. Arch) | Pass Marks | 32 |
| Year / Part | I / I | Time | 3 hrs. |

Subject: - Computer Programming (CT401)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

1. a) What is computer program? Discuss in brief about different generation of programming languages. [1+4]
b) Why is algorithm and flow chart development important in problem solving? Write an algorithm and draw flow chart to test a number entered by user whether it is even or not. [2+3]
2. a) What is the identifier? What are the ways to give value to variable? Explain with example? [1+2+1]
b) Explain about input and output function available in C with syntax and example of each part. [2+2+2]
3. a) Write algorithm, draw flow chart and program to input a number check "it is Armstrong or not. [2+2+2]
b) What do you mean by selective and repetitive statement? Why do we need break and continue statement? [2+2]
4. a) What do you mean by "call by value and call by reference"? Explain it with suitable example. [4]
b) Can we pass whole array element from the function? Write the program to pass an array to function and sort them. [6]
5. a) Write a program that finds the largest word in a given sentence. [4]
b) Differentiate between the methods of passing argument to function with example. What are their advantages and disadvantages? [6]
6. What is structure? Why is it necessary? Write a program to add two distances given in feet and inch format using structure. [1+1+6]
7. a) What is null pointer? What will be the output of following program, explain. [1+3]

```
#include<stdio.h>
int main() {
    if( ! NULL )
        printf("C programming is easy");
    else
        printf("C programming is not easy");
    return 0 ;
}
```

- b) Write a program to calculate the length of string without using string handling function. [4]
8. A file name employee.txt stores employee name, employee id and employee salary. Write a program to display the detail of all employees in the order of their salary. [8]
9. Write a program in FORTRAN to read 10 integers from user and sort them in ascending order and display it in screen. [6]