

PROBLEM SOLVING AND PROGRAMMING CONCEPTS

Duration: 2 Hrs

Marks: 60

Instructions: 1.All Questions are compulsory

2.Figures to the right indicate marks

- Q.1.A.State whether the following statements are true or false (5*1=5)
- a. scanf() function is used to read data from keyboard.
 - b. C is a case sensitive language.
 - c. Every program statement in C must end with a semicolon.
 - d. An Exit controlled loop is executed at least once.
 - e. Pointer variable holds address of a variable of a similar data type.
- Q.1.B. Find errors if any,in the following C statements. (5*1=5)
- a. `int a[5]=1,2,4;`
 - b. `a=b-c*2;`
 - c. `if(x>=10) then printf("\n");`
 - d. `sum+=10;`
 - e. `int *p=5;`
- Q.2.a.Who designed C Language? (2)
- Q.2.b.Write an algorithm and draw a flowchart to find sum of 2 numbers. (3)
- Q.2.c.Explain the process of executing a C program. (5)
- Q.3.a.What is a Symbolic Constant?. (2)
- Q.3.b.Differentiate between an Interpreter and a compiler. (3)
- Q.3.c.Write a C program to find largest element from an array. (5)
- Q.4.a.What are the rules for naming a variable?. (2)
- Q.4.b.what is a C function?.Explain with an example. (3)
- Q.4.C.write a C program to find factorial of a number. (5)
- Q.5.a.what is an application software?. (2)
- Q.5.b.State and explain any 3 inbuilt library functions. (3)
- Q.5.c. write a C program to swap contents of 2 variables using functions. (5)
- Q.6.a.what is a C pointer? (2)
- Q.6.b.Do-**while** is called an exit controlled loop. Explain. (3)
- Q.6.c.Write a C program to implement Switch statement. (5)