Code: 15A05101

R15

B.Tech I Year I Semester (R15) Regular & Supplementary Examinations November/December 2018
COMPUTER PROGRAMMING
(Common to all branches)

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
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1   Answer the following: (10 X 02 = 20 Marks)
   (a) What is software? Give at least two examples for system software and application software.
   (b) Write an algorithm to find the largest number among three numbers.
   (c) Distinguish between continue and break statements.
   (d) Write a program in C to find the sum of numbers present in an array.
   (e) List the advantages of functions.
   (f) Predict the result for the following code
        const int i = 5;
        i++;
        printf("i value = %d",i);
   (g) Define recursion.
   (h) In what way actual arguments differ from formal arguments.
   (i) Write the syntax to read string from the keyboard. Give example.
   (j) How can we read the character and set of characters? Give examples for each one.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2   (a) Using conditional operator write a C program to find the largest number from two numbers.
    (b) Draw the typical block diagram for a computer. Explain it in detail.
OR
3   (a) What is a flow chart? List and explain the different notations used to represent a flowchart.
    (b) Write a C program to find the sum of first six natural numbers.

UNIT – II

4   (a) How arrays differ from normal variables? Write a C program to find the largest number present in an array.
    (b) In what way if statements differ from switch case statements.
OR
5   Write a program in C language to perform the matrix multiplication.

UNIT – III

6   (a) Describe the pointer to pointer mechanism.
    (b) Illustrate the mechanism of passing the pointer variables as arguments to the functions.
OR
7   How can we define the scope of a function? List the rules for defining the scope of a variable. Give brief description about the differ storage specifiers.

UNIT – IV

8   (a) Distinguish between structures and unions.
    (b) Explain with example structures within structures.
OR
9   (a) List the advantages of using functions. In what way a built – in function differs from user defined function.
    (b) Write short notes on command line arguments.

UNIT – V

10 (a) Write and explain the different types of files.
    (b) Describe the macros with suitable example.
OR
11 (a) Give brief description about the various modes of a file.
    (b) Explain the role of files in C programming.