MCA (Revised) / BCA (Revised)
Term-End Examination
December, 2016

05076

MCS-011 : PROBLEM SOLVING AND PROGRAMMING

Time : 3 hours   *Maximum Marks : 100*

(Weightage 75%)

Note : *Question no. 1 is **compulsory**. Attempt any **three** questions from the rest.*

1. (a) Give the structure of a C program. Develop an algorithm, a flow chart and a program to add "n" numbers and find their average.   *10*

    (b) Write a C program to illustrate how the marks of 10 students are read in an array and then used to find the maximum marks obtained by a student in the class.   *10*

    (c) Using pointers, write a C program to find out the position and address of the first occurrence of any character given as input in a string.   *10*

    (d) Write a program, using files, to copy the contents of one file to another with a different file name.   *10*

2. (a) Write a program to initialize 3 names in an array of strings and display them. *5*

(b) What is Call By Value ? Give an example. *5*

(c) Explain function prototypes with an example for each. *10*

3. (a) Write a program to print the first 10 even numbers using **"goto"** statement. *10*

(b) Write a program to read two strings and append the second string to the first string, using arrays. *10*

4. (a) Write a program to swap the values using the Pass by Value and Pass by Reference methods, separately. *10*

(b) Write a program to test whether the given string is a palindrome or not. *10*

5. (a) What is a macro ? Write a macro to demonstrate #define, #if, #else preprocessor commands. *10*

(b) Write a program using fread( ) and fwrite( ) to create a file of records and then read and print the same file. *10*

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