

MCA (Revised) / BCA (Revised)

Term-End Examination

07464

December, 2014

**MCS-011 : PROBLEM SOLVING AND
PROGRAMMING**

Time : 3 hours

Maximum Marks : 100

(Weightage 75%)

**Note : Question number 1 is compulsory. Answer any
three questions from the rest.**

1. (a) Design an algorithm and draw a corresponding flow chart and write a C program to divide two numbers. 10
- (b) What are the rules for naming variables in C? 5
- (c) Write a program to search in an already created file "xyz.dat" which contains students' data and update it.
Hint : Use file handling concept. 10
- (d) Write a program to calculate the first smallest divisor of a number *using break* statement. 5
- (e) Write a program in C to swap the values of two variables using pointers concept. 10

2. (a) Write a program that initialises 3 names in an array of strings and displays them. 5
- (b) What is call by value ? Give example. 5
- (c) Explain recursion program with a suitable example. 10
3. (a) Write a program to print first 10 even numbers using *goto* statement. 5
- (b) Explain Function Prototypes with an example for each. 10
- (c) Write a program to perform the comparison of two strings (use string function). 5
4. (a) Write a program in C to sort list of n integers, using any of the sorting algorithms. 10
- (b) Write a program to test whether the given string is a palindrome or not. 10
5. (a) Write a macro to demonstrate #define, #if, #else preprocessor commands. 10
- (b) Write a C program using fread() and fwrite() to create a file of records and then read and print the same file. 10