

(Pls write your Exam roll No.)

Exam Roll No.....

## END TERM EXAMINATION

FIRST SEMESTER [MCA] DECEMBER-2009

**Paper Code: MCA 105**  
**Paper Id-44105**

**Subject: Problem Solving Using C**  
**(Batch: 2004-2009)**

Time-3 hours

Maximum Marks: 60

**Note: Attempt all questions as per internal choices given in each**

- Q1 (a) What do you understand by priority of operators? (10x2=20)  
(b) Give the syntax of switch –case statement.  
(c) What is the use of break statement?  
(d) Give syntax of ternary operators with examples.  
(e) What is recursion?  
(f) What is preprocessor?  
(g) Define union with examples.  
(h) Write syntax of any two library functions used in strings and state their purpose.  
(i) What do you understand by top-down design?  
(j) Define algorithm.

### UNIT-I

Q2 What do you understand by operators and expressions? How many different types of operators are available in C? Explain with the help of example. (10)

**OR**

Write a program in C to print the following:-

1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5

(10)

## **UNIT-II**

Q3 Differentiate between the call by value and call by reference of function calling with the help of example. (10)

**OR**

Define pointer. Write a 'C' program to find the length of a given string using pointer. (10)

## **UNIT-III**

Q4 What is structure? Explain its declaration and usage with an example. (10)

**OR**

Write a 'C' program to copy the contents of one file to another file. (10)

## **UNIT-IV**

Q5 What are the features of an algorithm? Write an algorithm for binary search. (10)

**OR**

Write a program in 'C' to print the Fibonacci series up to 10 terms (10)