

S.B. Roll No. \_\_\_\_\_

**COMPUTER PROGRAMMING USING 'C'**

3<sup>rd</sup> Exam/Comp/6244/May'08

Duration: 3 Hrs.

M.Marks: 75

**Section A**

- Q1. Fill in the blanks: 15
- In 'C' integer division results in truncation.
  - In a 'C' program, constant is defined before main.
  - In a for loop, if the condition is missing, then it is assumed to be present and taken to be true.
  - If  $a=9$ ,  $b=5$  and  $c=3$ , then the expression  $(a-a/b*b*c)>a\b%c$  evaluates to false.
  - If a 'switch' feature is used, then default case, if used, can be placed anywhere.
  - The following statement is syntactically correct for (; ;):
  - Pointer is a dynamic array.
  - The statement `printf ("%d", ++S);` prints 6.
  - Individual members can be initialized within a structure type declaration.
  - Void can be used in an expression.

**Section B**

Note: Attempt any five questions.

- Q2 i. What is the output of the following program 5x6

```
Main ( )
{
  int a =4;
  change (a);
  printf ("%d", a);
}
change (a)
int a;
{ printf ("%d", ++a); ?
```

- Draw a flow chart for finding the biggest number from among a given list of numbers.
- What is available? How are the variables named and declared in 'C' language?
- Explain any two string handling functions in 'C'.
- What is a structure? How is it different from an array? How are they defined and initialized? Explain with example.
- State advantages and disadvantages of pointers.
- Explain how a file is opened and closed.

**Section C**

- Q3. Write a program to find the factorial of a given integer and use it to find

$nC_r$

$$nC_r = \frac{n!}{r!(n-r)!}$$

15

OR Describe the various I/O statements and assignments statements in 'C' languages. Also discuss the various data types used.

- Q4. Write the program for the following 15

- To list all the numbers which are divisible by 2 in an array of 'n' integers.
- To search an element in an array of 'n' elements
- To find the sum of odd and even numbers in a given list of values.

OR Write short note on

- Call by value and call by reference
- Steps in development of a program
- Break and switch statements