

1C7104

Roll No. : _____

Total Printed Pages : **2****1C7104****M. C. A. (Sem. I) Examination, January - 2011**
Programming in 'C'Time : **3 Hours**][Total Marks : **80**[Min. Passing Marks : **32***Attempt all questions.**Marks of questions are indicated against each question.*Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)

1. _____ Nil _____ 2. _____ Nil _____

1 Answer the following questions in one line :

- (i) Define flowchart.
- (ii) List the basic datatypes in C language.
- (iii) Write the following statement in its equivalent forms :
total=total+1;
- (iv) What is the one principal difference between the 'while' loop and the 'do....while' loop?
- (v) What is an array?
- (vi) Define enumeration.
- (vii) List the modes in which a data file may be opened in C language.
- (viii) What does the 'void' return type of a function signify?
- (ix) What is the arrow (\rightarrow) operator used for?
- (x) For an integer array, arr[3], where arr[0]=1. arr[1]=5 and arr[2]=3, what will be the values of arr[1],*arr+1 and *(arr+1)?

10×1

2 Answer each part in maximum 50 words :

- (i) What are preprocessors? Also write their use with example.
- (ii) What are system calls?
- (iii) Write a program that reads a character in upper case and prints whether it is a vowel (a,e,i,o,u) or not.
- (iv) Differentiate between the 'break' and 'continue' statements with examples.
- (v) Distinguish between getc() and getchar() functions.

5×3

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[Contd...

- 3** Answer each part in maximum 150 words :
- (i) What are the storage class specifiers in 'C'? Discuss
 - (ii) What is recursion? Write a program using a recursive function to generate and print the first five Fibonacci numbers.
 - (iii) What is Dynamic Memory Allocation? Explain
 - (iv) What is the difference between structures and unions?
 - (v) Describe the use of the 'argc' and the 'argv' variables. Which obtain values from the command line ?

5x4

- 4** (i) What is a pointer? Discuss the use of pointers. How are pointer variables declared and initialized ?

10

- (ii) Write a program to accept a string and print its reverse.

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- 5** (i) Write a program to enter 20 numbers from a user and then write the even numbers and odd numbers entered by the user in two separate files.

15

OR

- (ii) What is the function? Distinguish between standard (library) and user defined functions and discuss parameter passing in functions. Give examples.

15

