

951 = 1/3

Subject Code—951

**M.C.A. (First Year) EXAMINATION**

(5 Years Integrated Course)

MCA-102

Computer Programming and Problem Solving Using C

*Time : 3 Hours*

*Maximum Marks : 100*

**Note :** Attempt any *Five* questions. All questions carry equal marks.

1. (a) Why C language is named so ? Discuss its origin and provide the general structure of C language program detailing out every construct in it. 12
- (b) What are the rules applicable for jumping in and out of various types of loops in C language ? 8

P.T.O.

Q51 = 2/3

2. Differentiate between the following :
  - (a) Union and Structures
  - (b) Automatic, External and Static Variables
  - (c) *main* ( ) and user-defined function
  
3. (a) What do you mean by Pointers ? Illustrate the strength of pointers through some examples.  
    (b) What are 'Data Types' ? What are the types supported by C language ? Illustrate the importance of each.
  
4. (3) (a) What do you understand by Analysis ? Discuss various steps in problem analysis.  
    (4) (b) What is an algorithm ? What are the characteristics of a good algorithm ? How is it helpful in problem solving ? Explain.
  
5. (a) What do you mean by C programming ? Illustrate its significance in development.

June 2008

8. Write short notes on the following :
- (a) String I/O functions
  - (b) Pointer arithmetic
  - (c) Storage classes
  - (d) Data Files.

$$9470 = \frac{3}{3}$$