## Subject Code—2047-X

## P.G.D.C.A. EXAMINATION

(First Semester)

(Re-appear)

MS-02

## COMPUTER PROGRAMMING AND PROBLEM SOLVING

Time: 3 Hours Maximum Marks: 100

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

What do you mean by a flowchart? What are
its advantages and disadvantages? What are
various symbols used to draw a flowchart.
Also draw a flowchart to find the largest among
N numbers.

- What are the various data types available in C? Give the memory requirement of each type. What are the data type manipulators Explain.
- Discuss various control structures available i C with suitable examples.
- What is an array ? How are arrays declare and initialized ? Write a program in C t multiply two given matrices.
- What are strings? Explain string I/O function. Write a program in C to read a string text an count the number of vowels in text.
- 6. Distinguish between the following:
  - (a) Actual and formal parameters
  - (b) Global and Local variables
  - (c) Auto and extern variables
  - (d) Array and struct
- Explain pointers in 'C'. Also explain operation on pointers and array of pointers.

- 8. Write short notes on the following:
  - (a) File functions
  - (b) Recursion.