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BCA Iˢᵗ Semester (Old Sylb. 2016)

INTRODUCTION TO PROGRAMMING C–I

Paper—I

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt any **FIVE** questions. All questions carry
equal marks.

1. Define and distinguish between algorithm and flowchart.
   Write an algorithm for finding the smallest and the largest
   number from a list of numbers.   15

2. What are the different phases of problem solving ? Explain.
                                                           15

3. Write short notes on the following :

   (a) Identifier

   (b) Keyword

   (c) Constant

   (d) Variable

   (e) Symbolic constant.   5×3=15

4. What are the different methods of performing input and
   output in C ? Explain giving examples.   15

5. Define and distinguish between the following :

   (a) For and while loops

   (b) Break and continue statements

   (c) If and switch statements.   3×5=15

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6. Write a program to print factorials of first n natural numbers in a sequence using recursion. 15

7. Define and distinguish between the following :

   (a) Function declaration and function definition

   (b) Call by value and call by address

   (c) Formal parameters and actual parameters.

   $3 \times 5 = 15$

8. Write a program to add two matrices and store the result in third matrix. 15