## B. E. First Semester (ALL) / SoE – 18-19 – Rev – FY-201 Examination

**Course Code : IT 2101**          **Course Name : Introduction to Computer Programming**

Time : 2 Hours]                                                            [ Max. Marks : 40

**Instructions to Candidates :—**
   (1)   Attempt any **Four** questions out of **Six**.
   (2)   All questions carry **Ten** marks.
   (3)   Assume suitable data wherever necessary.

1.  Solve any **One** :—

   (A)   Discuss different types of errors in detail.                    10

**OR**

   (B)   (1)   Write an algorithm and draw a flowchart to calculate simple interest.

         (2)   Write an algorithm and draw the flowchart to reverse the three digit number.                                                          10

2.  Solve any **One** :—

   (A)   Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following :
         Percentage >= 90% : Grade  A
         Percentage >= 80% : Grade  B
         Percentage >= 70% : Grade  C
         Percentage >= 60% : Grade  D
         Percentage >= 40% : Grade  E
         Percentage< 40% : Grade  F                                      10

**OR**

   (B)   Write menu driven program to calculate the area of different geometrical images like circle, rectangle, triangle.                        10

3. Solve any **One** :—

   (A)  Differentiate entry controlled and exit controlled loop in detail with example.
   10

   **OR**

   (B)  Write a C program to convert decimal number into binary number.  10

4. Solve any **One** :—

   (A)  Differentiate Call by Value and Call by reference with example.     10

   **OR**

   (B)  Write a program to display Fibonacci series by using Recursion and function with argument and no return value.     10

5. Solve any **One** :—

   (A)  Write a C program to input *'n'* elements for an array and sort the array using Bubble sort.     10

   **OR**

   (B)  Write a C program to input Two Dimensional (2D) Array and find the lowest element.     10

6. Solve any **One** :—

   (A)  Write C program to input two strings and check whether it is palindrome or not without using Standard Library Function.     10

   **OR**

   (B)  Write a program to read the contents of files and count the new lines, words, spaces and tabs using command line arguments.     10