ECC106: COMPUTER PROGRAMMING 1 CAT

Time : 1hr

Instructions: answer all questions

[handwritten annotation at top right]
```
int main() {
    printf(" In C, lowercase letters are
            significant);
    return 0;
}
```

1. Write a program that prints the following text at the terminal. [4 marks]
   a) In C, lowercase letters are significant
   b) Main is where program execution begins
   c) Opening and closing braces enclose program statements in a routine
   d) All program statements must be terminated with a semicolon

2. Using a simple program, distinguish between local variables and global variables. [4 marks]

3. Write the output of the following program. [2 marks]

   int main ( )
   {
   Printf("Testing...");
   Printf("...1");
   Printf("...2");
   Printf("..3");
   Printf("\n");
   Return 0;

   }

4. Identify the syntax errors in the following program. [4 marks]

   #include<stdio.h>
   {
   INT sum;
   /*COMPUTE RESULT
   sum=25+37-19
   /*DISPLAY RESULTS//
   Printf("the answer is %f\n",sum);
   Return 0;

   }

   [handwritten annotations]
   - Misplaced opening curly brace
   - Incorrect data type
   - Incorrect writing of comments.
   - Incorrect format specifier

5. Write a program that can prompt the user for three scores in three subjects, determine the average and display to the user. The program should process scores of 10 students. [6 marks] *[handwritten: loop]*

6. Write a program to generate and display a table of x and x^2 for integer values of x ranging from 1 to 5. Be certain to print appropriate column headings. [5 marks] *[handwritten: loop]*

7. Write a program that asks the user to type in two integer values at the terminal. Test these two numbers to determine if the first is evenly divisible by the second and then display an appropriate message at the terminal. [5 marks] *[handwritten: decision]*

8. Write a program that calculates the average of an array of 10 integer values. The user should be prompted to enter the values at the terminal. [5 marks] *[handwritten: Arrays]*

9. List the steps that should be followed when writing a program. [5 marks]

[handwritten at bottom left]
while
do while, for loop