Attempt the following questions.

Ouestion 1:



Midterm Exam

Subject: Computer Applications - SUR 112

(2 Marks)

Date: Sat 12/11/2016 **Duration:** 1 hour

№ of Questions: 5 in 1 page(s)

Total Mark: 10

Each of the following programs has some errors. Locate as many as you can.

```
b)
   a)
#include <iostream>;
                                                           using namespace std;
using namespace std;
                                                           int main ()
main
                                                                double number1, number2, sum;
    double number, half;
                                                                Cout << "Enter a number: ";</pre>
    cout << "Enter a number to be divided\n"</pre>
                                                                Cin << number1;</pre>
    cout << "in half.\n"
                                                                Cout << "Enter another number: ";
    cin >> number1;
                                                                Cin << number2;</pre>
    half =/ 2;
                                                                number1 + number2 = sum;
    cout << fixedpoint << showpoint << half << endl;</pre>
                                                                Cout "The sum is " << sum
                                                                return 0;
```

Question 2: (2 Marks)

Convert the following if/else if statement into a switch statement:

```
if (choice == 1)
{
    cout << fixed << showpoint << setprecision(2);
}
else if (choice == 2 || choice == 3)
{
    cout << fixed << showpoint << setprecision(4);
}
else if (choice == 4)
{
    cout << fixed << showpoint << setprecision(6);
}
else
{
    cout << fixed << showpoint << setprecision(8);
}</pre>
```

Question 3: (2 Marks)

Write a program that calculates a car's gas mileage. The program should ask the user to enter the number of gallons of gas the car can hold and the number of miles it can be driven on a full tank. It should then display the number of miles that may be driven per gallon of gas.

Question 4: (2 Marks)

Write a program that asks the user to enter two numbers. The program should use the conditional operator to determine which number is the smaller and which is the larger.

Question 5: (2 Marks)

Write a program that asks the user for a positive integer value. The program should use a loop to get the sum of all the integers from 1 up to the number entered. For example, if the user enters 50, the loop will find the sum of 1, 2, 3, 4, ... 50.

Input Validation: Do not accept a negative starting number.

Good Luck
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