



Dept. of Computer Engineering
First Exam, First Semester: 2013/2014

Course Title: Programming Language	Date: 12/11/2013
Course No: (630263)	Time Allowed: 50 minutes
Instructors: Dr. Ali Khawaldeh, Eng. Anis Nazer, Eng. Sultan Rushdan	No. of Pages: 3

Please Choose your section:

- Instructor: Dr. Ali Khawaldeh Eng. Anis Nazer: Eng. Sultan Rushdan
 Lecture time: 10:10 ح ث خ 13:10 ح ث خ 11:15 ن ر 14:15 ن ر

Question 1: (5 points)

Indicate whether the following statements is true or false

Statement	True/False
The result from the expression $3*6/2*(5-2)$ is 3	
If $x=10, y=7, z=13$ then the logical expression $(x < y) (x < z) \&\& (y > z)$ is true.	
Every if statement must have an else statement associated to it.	
<code>cout << "\n";</code> is equivalent to <code>cout << endl;</code>	
Execution in a C++ program starts from line number one	

Question 1: (5 points)

Answer the following questions

Task	Answer
a) find the syntax errors in the code and correct them: <pre>int main() { int a=1; b=5; double c = 7.5 cout >> a + b / C ; return 0; }</pre>	
b) Write a condition to test if a number N is even	
c) Write a C++ statement to calculate the following: $R = \frac{1}{s^2 - 6} + \frac{s}{s + 1}$	
d) rewrite the following using a single statement with the += operator: <pre>a = b + y; b = a + 7;</pre>	

Question 3:**(6 points)**

what is the output of the following code segments (Assume that required input/output libraries are included) :

	Code	Output
1)	<pre>int main() { int a=13,b=5; double c=17.5; cout<< a+b-c <<endl; return 0; }</pre>	
2)	<pre>int main() { int w, x = 5, y, z = 3; y = x - z; z = 2 * y + 3; w = x - 2 * y + z; cout << w; }</pre>	
3)	<pre>int main() { int x=5,y=7,z; if(x<y) z=x-2*y; else z=2*x-y; cout<<"z="<<z<<endl; return 0; }</pre>	
4)	<pre>int main() { int w=2, x = 5, y=-3, z=0; w = ++x - --z; w *= y; cout << w; return 0; }</pre>	
5)	<pre>int main() { double a=1, b=2, c=3; if (a < b) { if (c == a) cout << "Easy" << endl; else cout << "Simple" << endl; } else if (b < c) { cout << "hard" << endl; } else { cout << "tough" << endl; } return 0; }</pre>	

Question 4:**(5 points)**

Write a program to calculate the volume of a cone where the volume of the cone can be calculated by the following equation

$$\text{cone volume} = \frac{1}{3} \pi R^2 L, \text{ where } \pi = 3.14159$$

The user should enter the values of R and L from the keyboard as real numbers. The program should display an error message if the value of L or R is less than zero

GOOD LUCK