Quiz **Quiz 5**

Opens at: Feb 3, 2024, 00:00 Due on: Feb 8, 2024, 23:59

Total Score 6

Q1. Consider the following program having multi-level inheritance:

\begin{verbatim}
Note:Includes all required header files

```
class A {
public:
  void print()  { cout << "In A" << endl; }
};

class B : public A {
public:
  void print() { cout << "In B" << endl; }
};

class C: public B { };

int main(void)
{
  C c;
  c.print();
  return 0;
}
```

\end{verbatim}

What is the outcome of the compilation and execution of the above program?

Score: 1 Neg. Score: 0

Successful compilation, but no output

In A

Compilation error

✔ In B (Your answer)

Your Score: 1

Q2. What will be the output of the following program?

\begin{verbatim}

Note: Add all necessary header files

```
class Base
{
public:
   virtual void show() { cout<< "In Base" << endl; }
};

class Derived: public Base
{
public:
   void show() { cout<< "In Derived" << endl; }
};

int main(void)
{
   Base *bp = new Derived;
   bp->show();
   Base &br = *bp;
   br.show();
   return 0;
}
```

\end{verbatim}

Score: 1 Neg. Score: 0

- In Base
- In Derived
- In Derived
- In Base
- In Base
- In Base
- ✔ In Derived (Your answer)
- In Derived

Your Score: 1

Q3. Which of the following catch statements is used to catch any exception?

Score: 1 Neg. Score: 0

- ✔ catch(...) (Your answer)
- catch()
- catch (all)
- catch (const char* msg)

Your Score: 1

Q4. Consider the following statements about C++ templates.
S1: Template is a type of compile time polymorphism.
S2: It allows the programmer to write one code for all data types
Which of the following is correct?

Score: 1 Neg. Score: 0

Only S2 is correct

Neither S1 nor S2 is correct

Only S1 is correct

✔ Both S1 and S2 are correct (Your answer)

Your Score: 1

Q5. Which of the following should not be present in a high-quality software routine/function?

Score: 1 Neg. Score: 0

An If statement with a for loop within it

✔ A parameter that is never used in the function (Your answer)

A while loop with an if statement within it

✔ A variable whose meaning cannot be interpreted easily (Your answer)

Your Score: 1

Q6. Suppose you want to ensure that the value of a variable balance should never be less than 0 at some location in your code written in C++. Which one of the following is the correct assert statement to be placed at that location?

Score: 1 Neg. Score: 0

assert ($balance>0$);

✔ assert ($balance \ge 0$); (Your answer)

assert ($balance<0$);

assert (0);

Your Score: 1