Unit 9 - Week 8

Week-8: Assignment-8

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2018-10-04, 23:59 IST.

2 points

1) Question 1

What will be the output of the following code?

```cpp
#include <iostream>
#include <string>
using namespace std;

int main() {
    try {
        throw 'a';
    }
    catch (int x) { cout << "Caught 1 " << x; }
    catch (double x) { cout << "Caught 2 " << x; }
    catch (string x) { cout << "Caught 3 " << x; }
    catch (...) { cout << "Default Exception"; }
    return 0;
}
```

Multi-choice Question

- a) Caught 1 a
- b) Caught 2 a
- c) Caught 3 a
- d) Default Exception

No, the answer is incorrect.

Score: 0

Accepted Answers:
- d) Default Exception

2)
Question 2

Consider the following code snippet, fill in the blank with correct template header to generate the output:

6
10

```cpp
#include <iostream>
using namespace std;

template<typename T> T GetMax(T a, T b) {
    T result;
    result = (a > b) ? a : b;
    return (result);
}

int main() {
    int i = 5, j = 6, k;
    long l = 10, m = 5, n;

    k = GetMax<int>(i, j);
    n = GetMax<long>(l, m);

    cout << k << endl;
    cout << n << endl;
    return 0;
}
```

**Hint**

No, the answer is incorrect.

Score: 0

Accepted Answers:

(Type: String) template T GetMax (T a, T b)
Question 3
What will be the output of the following code snippet? (MCQ, Mark)

```cpp
#include <iostream>
using namespace std;

void myFunction(int test) {
    try {
        if (test)
            throw test;
        else
            throw "Value is zero";
    }
    catch (int i) {
        cout << "CaughtOne ";
    }
    catch (const char *str) {
        cout << "CaughtString ";
    }
}

int main() {
    myFunction(1);
    myFunction(2);
    myFunction(0);
    myFunction(3);
    return 0;
}
```

- a) CaughtOne CaughtOne CaughtString CaughtString
- b) CaughtOne CaughtString CaughtString CaughtOne
- c) CaughtOne CaughtOne CaughtOne CaughtOne
- d) CaughtOne CaughtOne CaughtString CaughtOne

No, the answer is incorrect.
Score: 0

Accepted Answers:
d) CaughtOne CaughtOne CaughtString CaughtOne

4)
Question 4

What will be the output of the following code snippet?  

```cpp
#include <iostream>
using namespace std;

struct MyException : public exception {
    const char * what() const throw () {
        return "C++ Exception";
    }
};

int main() {
    try {
        throw MyException();
    }
    catch (MyException& e) {
        cout << "MyException caught" << endl;
        cout << e.what() << endl;
    }
    catch (exception& e) {
        cout << "Exception caught" << endl;
        cout << e.what() << endl;
    }

    return 0;
}
```

No, the answer is incorrect.
Score: 0
Accepted Answers:
c) MyException caught
   C++ Exception

2 points
Question 5

What will be the output of the following program?  

```cpp
#include <iostream>
using namespace std;

class Test {
    public:
        Test() { cout << "In Constructor" << endl; }
        ~Test() { cout << "In Destructor" << endl; }
};

int main() {
    try {
        Test t;
        throw 10.00;
    } catch(int i) {
        cout << "Caught Integer" << i << endl;
    } catch(...) {
        cout << "Caught Default" << endl;
    }
    return 0;
}
```

a) In Constructor
   In destructor
   Caught Integer 10
   Caught Default

b) In Constructor
   Caught Integer 10

c) In Constructor
   In Destructor
   Caught Default
   Caught Default
d) In Constructor
   Caught Default

No, the answer is incorrect.
Score: 0

Accepted Answers:
c) In Constructor
   In Destructor
   Caught Default
Question 6

Consider the following Template.

```c++
template <class T>
T Comp(T x, T y) {
    return x + y;
}
```

If \( a = 3.1 \), \( b = 5 \), \( c = 2 \), \( d = 3.7 \) and if \( a \), \( b \), \( iC \) are declared as \textbf{int} and \( c \), \( d \), \( dC \) as \textbf{double}, what will be stored in \( iC \) and \( dC \) for the following calls in main()?

\[
iC = \text{Comp}(a, b);
dC = \text{Comp}(c, d);
\]

- a) 8 and 5
- b) 8.1 and 5
- c) 8.1 and 5.7
- d) 8 and 5.7

\textbf{No, the answer is incorrect.}

\textbf{Score: 0}

\textbf{Accepted Answers:}

\textit{d) 8 and 5.7}

2 points

7)

Question 7

Consider the following class Template.

```c++
template<class T = int, class U = int>
class Test {
    T x; U y;
    public:
        Test(T t, U u): x(t), y(u) {};
        void display() { cout << x << "," << y << endl; }
};
```

What will be the output of the following instantiations in main()?

\[
\text{Test<char, char> b('a', 'b');}
\text{Test<char, 12>} c('s', 12.9);
\]

\textit{Note: ASCII Code of 's' is 115.}

- a) a,b
  s,12.9
- b) a,b
  115,12
- c) a,b
  s,12
- d) 97,b
  115,12.9

\textbf{No, the answer is incorrect.}

\textbf{Score: 0}

\textbf{Accepted Answers:}

\textit{b) a,b}

\textit{115,12