Quiz Number 2
(Closed book/Closed Notes:10 minutes)
Tuesday, December 23, 2003

Question 1: Consider the following piece of code. Write down the output in the space provided below (on next page) when the program in main.cc is executed.

```cpp
// test.h
class checkingOutput
{
    private:
        int num;

    public:
        checkingOutput(int);
        ~checkingOutput();
};

// test.cc
#include <iostream>
#include "test.h"
using namespace std;
checkingOutput::checkingOutput(int a)
{
    this->num = a;
    cout << "In ctor" << a << endl;
}
checkingOutput::~checkingOutput()
{
    cout << "In dtor" << num << endl;
}

// main.cc
#include <iostream>
#include "test.h"
using namespace std;
checkingOutput a(1);

void create()
{
    checkingOutput b(2);
    static checkingOutput c(3);
    checkingOutput d(4);
}

int main()
{
    checkingOutput e(5);
    static checkingOutput f(6);
    create();
    checkingOutput g(7);
    return 0;
}
```
Question 2: We know that compiler provides us with a default constructor. State as many reasons as possible due to which you will need to write a constructor of your own.

Question 3: State all the reasons why you would want to provide an initialization list?