



- 7 a) What are the rules for Virtual functions? What is the importance of Virtual Destructor? [7M]  
 b) Explain in detail how the members of class can be accessed using the pointers to base class and derived class. [7M]

Or

- 8 a) Analyze the following code and find the output and justify your answer [7M]

```

class A                class B : public A        class C: public B
{
public:
virtual void f1()
{ cout << "A::f1" <<
endl; }
void f2()
{ cout << "A::f2" <<
endl; }
};
int main()
{
B *b = new C();
b->f1();
b->f2();
return 0;
}

```

- b) Explain in detail about *this* pointer to base class and derived class. [7M]
- 9 a) Write a function template to perform bubble sort. [7M]  
 b) Demonstrate handling of exception with multiple catch blocks. [7M]

Or

- 10 a) Discuss various exception handling mechanisms. [7M]  
 b) Implement function template to find a given element in the array. [7M]  
*Note : array may be int or float.*

