Candidate No: _____

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

Faculty of Technology and Engineering

B.Tech. (CE) SEM - ~~III~~ IV Internal Examination II, 2011-12

CE208: Object Oriented Programming using Visual C++

Date: 11.04.2012, Wednesday Time: 09:30 a.m to 10:30 a.m Maximum Marks: 30

Instructions:

1. *All questions are compulsory.*
2. *Indicate clearly, the option you attempt along with its respective question number.*
3. *Figures to right indicate marks.*
4. *Rough work is done in the last page of main answer sheet; don't write anything on the question paper.*

Q -1 Answer the following questions.

[A] Differentiate: Abstract class and interface. **02**

[B] Under what situation activity diagram should not be used? **01**

[C] Which model specifies the allowable scenarios that may occur for a system? **01**

[D] Draw the use-case diagram for ATM System **03**

[E] Draw the Activity diagram for railway reservation system. **03**

OR

[E] Draw the class diagram for railway reservation system. **03**

Q - 2 Answer the following questions.

[A] Explain basic to class, class to basic and class to class type conversion. **03**

[B] What is Operator Overloading? Why is it necessary to overload an operator? Explain Operator function with syntax. **03**

[C] What is MFC programming? Explain WinMain function? **02**

[D] 1) Which of the following is true or false? **02**

a) member function of the derived class can access private of base
b) member function of the derived class can access protected of base
c) member function of the derived class can access public of base
d) b & c are true

2) Which of the following is true with respect to abstract class?

a) the instance of the abstract class can never be created
b) the pointer of abstract class can be created
c) a) and b) both are true
d) none of the above

Q - 3 Answer the following questions.

[A] Explain problem of hybrid inheritance and also mention the solution of the same. **03**

[B] What does polymorphism mean in VC++ language? How is polymorphism achieved at compile time and run time? **02**

[C] What will be the output of the following program? 01

```
class base
{   public: virtual void display(){   cout<<"Base class"<<endl;  } };
class derived : public base
{   public:  void display() { cout<<"Derived class"<<endl;  }   };
int main()
{   base *ptr;
    derived d;
     ptr = &d;
     ptr -> display();
     return 0;
}
```

a) Base class Derived class
b.) Derived class
c) Derived class Base class
d.) Base class

[D] Write a Program to enter information of an employee and display it by using late binding technique. 04

OR

[D] Write a Program to implement like this. Take necessary data members and member functions. 04