



[3780] – 34

M.C.A. (Semester – III) (Management Faculty) Examination, 2010
IT – 34 : OBJECT ORIENTED PROGRAMMING USING C++
(2005 Pattern)

Time : 3 Hours

Max. Marks : 70

- Note :** 1) Q. 1 is **compulsory**.
2) Solve **any six** from Q. 2 to Q. 10.
3) Figures to **right** indicate **full** marks.
4) Make suitable assumptions **wherever** necessary.

1. Explain output of the following programs. If errors, correct it. **10**

A) #include <iostream. h >

```
void main ( )  
{ int i = 0;  
for (i=0; I < 20 ; i ++)  
{ switch (i)  
case 0:i+=5;  
case 1 : i+=2;  
case 5:i+=5;  
default i+ =4;  
break;}  
cout <<j; } }
```

B) main ()

```
{ char c = - 64;  
int i = - 32  
unsigned int u = - 16;  
if (c>i) { printf (“pass1,”);  
if (c<U) printf (“pass2”);  
else printf (“Fail2”);  
}  
  
else  
printf (“Fail 1);  
if(i<U) printf (“pass2”);  
else printf (“Fail2”)  
}
```

P.T.O.



```
C)    #include <iostream.h>
        #include<conio.h>

        class test {
        static int cnt ;
        public: static void show count (void)
        {
        cout << "count :." << ++cnt << "in" ; }
        };

        void main()
        { test t1, t2, t3;
        t1.showcount( );
        t2.showcount( );
        t3.showcount( );
        }
```

D) Explain Iterators in STL.

- 2. A) What is namespace conflict ? How it is handled in C++ ? **5**
- B) What is generic program ? What is class template explain in detail ? **5**
- 3. A) Write a class VECTOR with a series of float values and perform the following operations : **5**
 - i) To create a vector
 - ii) To add two vectors – use object as parameter.
- B) What is a file mode ? Describe the various file mode options available. What is the difference between ios::ate and ios::app. **5**
- 4. What is parameterized constructor ? How the derived class constructors are used to pass parameters to base class in multi level inheritance ? Explain with program. **10**



5. Accept date 'D' in DD-MM-YYYY format and an integer number 'n' from keyboard. Write a program to overload + (plus) operator which gives the next date, 'n' days after 'D', in DD-MM-YYYY format. E.g. if D = 26-01-2010 & n = 5 then function returns 31-01-2010 10

6. Define a class to represent a Bank Account. Include the following

Data Members :

- a) Name of the Depositor
- b) Account No.
- c) Type of Account (Saving, Current, Fixed Deposit, Loan)
- d) Balance Amount.

Member Functions :

- a) To Assign initial value
- b) To Deposit an amount
- c) To withdraw an amount
- d) To display Name of Depositor & Balance.

Define all member functions and main(). Generate the saving account report slip as an output. 10

7. What is Exception ? Write a program to accept the string in upper case and display it in lower case. Raise an exception if input string is not in upper case. 10

8. What are file input and file output streams ? Explain seekg(), seekp(), tellg(), tellp(). 10

9. Write a C++ program that reads the data from command prompt and copy it to FILE1.txt. Also calculate and display total no. of Lines in FILE1. 10

10. Explain with example (**Any two**) : 10
A) Object Oriented Programming
B) Abstract Class
C) RTTI.