Total No. of Printed Pages:2

SUBJECT CODE NO:- H-172
FACULTY OF SCIENCE AND TECHNOLOGY
S.E. (CSE/IT)
Object Oriented Programming
(REVISED)

[Time: Three Hours]   **[Max.Marks:80]**

Please check whether you have got the right question paper.
N.B   1. Q.No.1 and Q.No.6 are compulsory.
         2. Solve any two from each section.

Section A

Q.1   Solve any five: 10
         a) What is the structure of C++ program?
         b) What is the use of scope resolution operator : : in C++?
         c) Write any four characteristics of friend function.
         d) Write any four rules for overloading operators.
         e) How does constructor differ from normal functions?
         f) When will you make a function inline? Why?
         g) How to create object in C++?

Q.2   a) Explain the following terms of OOP.   08
            i) Polymorphism
            ii) Inheritance
            iii) Data hiding
            iv) Class & object

         b) Describe the concept of call by value and call by reference with an example.   07

Q.3   a) What is the importance of static members in C++? Explain with example.   07

         b) Write a program to create class manager & implement concept of array of object.   08

Q.4   a) Explain parameterized and copy constructor, with suitable example.   07

         b) Write a program in C++ to overload unary minus operator using friend function.   08

Q.5   Write short notes on (any three)   15
         a) Recursive function
         b) Type casting
         c) Nesting of member function
         d) Destructor

1

H-172

Section B

Q.6   Solve any five   10
a) What is use of 'this'?
b) Define pure virtual function.
c) What are the generic classes in templates?
d) What is 'function overloading'?
e) Describe 'Try' and 'Catch' block.
f) List various file modes available in C++.
g) How to open and close the file?

Q.7   a) Define inheritance and write a program to illustrate multilevel inheritance.   07

b) Write a program to implement Run Time Polymorphism in C++.   08

Q.8   a) Explain the stream classes in C++.   07

b) Write a C++ program to read the file name and display the context of a file on screen.   08

Q.9   a) Write a program using the template concept to implement stack.   08

b) Explain how exception handling mechanism work in C++?   07

Q.10   Write short notes on (any three)   15
a) Template class
b) Virtual base class
c) Abstract class
d) Manipulators