M.K Institute of Computer Studies, Bharuch S.Y.BCA – 2 (Semester III)

SUB:-OOPS

Short Questions (1 Mark)

- 01. Is it possible to overload new and delete operators?
- 02. List out the operators that can not be overloaded.
- 03. What is self-referential structure?
- 04. Is it possible to overload ++ operator both (prefix and postfix)?
- 05. What do you mean by operator overloading?
- 06. Show how nameless temporary object can be created.
- 07. List the operators that can not be overloaded using friend function.

Long Questions

01. What is overloaded casting operator function? How is it created? Explain (05) with example.

OR

What is conversion function? How it is created? Explain with example.

02. What do you mean by overloading of a operator? Why is it necessary to overload an operator? (04)

Programs (5 Marks)

- 01. Write a program that consists of two classes time 12 and time 24. The first one maintains time on 12-hour basis, whereas the other one maintains time on 24-hours basis. Provide conversion functions to carry out conversion function from object of one type to another.
- 02. Create a Time class that stores the hours, minutes and seconds. Write a program to overload the + operator so that the user can add two times **OR** Write a program to overload the operator so that the user can substract two times.
- 03. Write a program that consists of two classes dmy and date. The first one contains data members day, month, year in data type integers. Class date contain one data members dt which contain date in character format. Write a program to input data in class dmy and apply conversion routing to carry out the conversion from object of dmy to object of date.
- 04. Create a complex class that stores the real and imaginary value of two variable. Overload the + operator so that the user can add the two variable and display in third variable.
- 05. Create a class "sample" that stores the weight and height. Overload the (+=) /(-=) operator with this operator and add the two values.
- 06. Create a class STRING which has character array as data member. Now overload –(minus) operator to reverse the string **OR** To compare two strings using = = operator overloading **OR** To concatenate strings using + operator overloading.
- 07. Create a class with atleast two data members. Overload >> and << operator.
- 08. Create a class FLOAT that contains one float data member. Overload all the four arithmetic operators so that they operate on the object of float. The operators should be overloaded using friend function.
- 09. Design a classes such that they support the followings

Rupee R!,R2 Pound P1,P2

P1=R1; -- Converts Ruppe to Pound

P2=R2; -- Converts Ruppe to Pound

Write a program which carry out conversion operation.