Examination	: Additional Sessional	Seat No.	: _____
Date	: 07/11/2012	Day	: Monday
Time	: 11:00 to 12:15	Max. Marks	: 36

INSTRUCTIONS:
1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

Q.1   Answer the Following :   **[12]**
(A)   What are static data members?   **[2]**
(B)   What is a destructor? Does a destructor take any argument?   **[2]**
(C)   What are the values of m and n after the following two statements are   **[2]**
        executed:
        a) int m = 5;
           int n = m++ * ++m;
(D)   Mention the lifetime and scope of all storage classes.   **[2]**
(E)   What is the difference between getch() and getche() function?   **[2]**
(F)   What is the principle reason for passing arguments by reference?   **[2]**

Q.2   Answer the following: **[12]**
(A)   What is the advantage of using default arguments in function?   **[2]**
(B)   What is object oriented programming? How is it different from the procedure   **[4]**
        oriented programming?
(C)   Define the class "Person" which has name (char[]) and age (int). Define the   **[6]**
        following constructors
        a. default
        b. with name as argument (assume age is 18)
        c. with name and age as argument
        and one member function to display these fields. Complete this program with
        main() function.
                                                                OR
(C)   Define class "Stack" which performs the operations to push data items into stack   **[6]**
        and to pop data items from stack. Define main() function to support this class.

Q.3   Answer the following: **[12]**
(A)   What is difference between private and public access specifier?   **[2]**
(B)   How can you make a function inline? How does an inline function differ   **[4]**
        from a normal function?
(C)   Declare a class called "time" having hours, minutes and seconds as member   **[6]**
        variables. Define a member function called add_time that accepts two objects of
        type time class, performs addition of time in hours, minutes and seconds format
        and returns an object of type time class. Write appropriate functions for
        initialization and display of member variables.
                                                                OR
Q.3   Answer the following: **[12]**
(A)   What is "Preprocessor Directive"?   **[2]**
(B)   Can a class have more than one constructor in a class? Explain with example.   **[4]**
(C)   Define class "Employee" which contains emp_name and emp_id as data members   **[6]**
        and member functions to get values of name and id for different objects and to
        display the values for objects. Create database of employees using array of objects
        of employee and display it.