



Examination : Additional Sessional Seat No. : _____
Date : 20/11/2013 Day : Wednesday
Time : 12:00 to 01:15 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) Write different types of manipulators. What is the use of manipulators? [2]
- (B) State the difference between OOP and POP. [2]
- (C) What is the difference between enumerated data type and int data type? [2]
- (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 main advantage of passing arguments by reference? [2]

Q.2 Answer the following: [12]

- (A) What is the advantage of using default arguments in function? [2]
- (B) Mention the characteristics of Object Oriented Programming. [4]
- (C) Declare a class String with data member 'name' which contains the following member functions: [6]
 - constructor for initialization of the data member
 - sorting
 - after sorting search the particular name
 - display that name

OR

- (C) Define class with constructors and destructors which displays following output: [6]
 - Line 1: Object 1 created.
 - Line 2: Display Function called in main.
 - Line 3: Object 2 created.
 - Line 4: Object 1 destroyed.
 - Line 5: Object 2 destroyed.

Q.3 Answer the following: [12]

- (A) What is difference between private and public access specifier? [2]
- (B) Explain Structure within Structure with example. [4]
- (C) Declare a class called "time" having hours, minutes and seconds as member 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. [6]

OR

Q.3 Answer the following: [12]

- (A) What is "Preprocessor Directive"? [2]
- (B) Explain overloaded functions with example. [4]
- (C) Define class "Employee" which contains emp_name and emp_id as data members 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. [6]
