

CS - 403

B.E. IV Semester

Examination, June 2013

Object Oriented Technology

Time : 3 Hours

Maximum Marks : 70/100

Note: There are eight questions. Attempt any five questions. All questions carry equal marks. Make suitable assumptions wherever necessary.

1. a) What is object oriented programming? How is it different from procedure oriented programming? What the unique advantages are of object oriented program?
b) What do you meant by dynamic binding? How is it useful in OOP?
2. a) Create a class called employee that contain a name (an array of character) and an employee number (type long). Include a member function called getdata() to get data from user for insertion into object and another function called putdata() to display the data. Assume the name has no embedded blanks.
b) Create a two classes DM and DB which stores the value of distances. Dm stores distances in Metres and Centimeters. DB stores in Feet and Inches. Write a program that can read values for the class objects and add one object of DM with another object of DB.

3. a) What is data hiding? How it is done in object oriented programming. What are the advantages of data hiding?
b) What are global and local object. Also explain what do you understand by object life time?
4. a) Why virtual keyword is used. Explain use of virtual base class, virtual function and pure virtual class?
b) What is multiple inheritances. Explain giving example?
5. a) How polymorphism is achieved at compile time and run time?
b) What do you mean by overloading of a function? When do we use this concept?
6. a) Give difference between association of object and aggregation of object?
b) What is the difference between Abstract class and Interface? When should you use an abstract class, when an interface, when both?
7. a) What is a container class? What are the types of container classes?
b) What are input and output streams?
8. Write short notes on any two of the followings:
 - a) Modeling association and aggregation
 - b) Redefined methods.
 - c) Metaclass.
