



CS

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1329

Reg. No. :

Name :

**Fourth Semester B.Tech. Degree Examination, April/May 2012
(2008 Scheme)
08.404 : OBJECT ORIENTED TECHNIQUES (RF)**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions.

1. What is the difference between function overloading and function overriding ?
2. Briefly explain the concept of encapsulation.
3. Create an overloaded rotate () function that left rotates the bits in its argument and returns the result. Overload it so it accepts ints and longs.
4. What is an inline function ?
5. Using new, show how to allocate a double and give it an initial value of -123.9784.
6. What is an independent reference ? Give an example.
7. What is use-case diagram ?
8. How is cout able to display various types of data without any special instructions ?
9. Explain why a friend function cannot be used to overload the assignment operator = .
10. What is an abstract class ?

PART – B

Answer **any one full** question from **each** Module.

Module – I

11. a) What are the unique advantages of an object oriented paradigm ? **10**
- b) What is a reference ? What are the advantages of using a reference parameter ?
Write a function that uses reference variables as arguments to swap the
values of a pair of strings. **10**

OR



P.T.O.



12. a) Read a sequence of words from input. Use QUIT as a word that terminates the input. Print the words in the order they were entered. Don't print a word twice. 10
- b) List a few areas of application of OOP technology. 5
- c) How does a constant defined by const differ from the constant defined by the preprocessor statement # define. 5

Module – II

13. a) What is a constructor ? What are the characteristics of a constructor function ? 10
- b) Write the general forms for new and delete. What are the advantages of using them instead of malloc () and free () ? 10

OR

14. a) What is a static member function ? 5
- b) A bookshop maintains the inventory of books that are being sold at the shop. The list includes details such as author, title, price, publisher, and stock position. Whenever a customer wants a book, the sales person inputs the title and author and the system searches the list and displays whether it is available or not. If it is, then the system displays the book details and requests for the number of copies required. If the requested copies are available, the total cost of the requested copies is displayed. Design a system using a class called books with suitable member functions and constructors. Use new operator in constructors to allocate memory space required. 15

Module – III

15. a) Write a program to perform complex number arithmetic operations using operator overloading. 10
- b) Explain the different types of inheritance supported by C++. 10

OR

16. a) Write a program that copies a text file. In the process, reverse the case of all letters. 12
- b) Illustrate with an example, how the endl and setw manipulator works. 8
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