

D 41453

Name.....

Reg. No......

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2008

Computer Science

CS 103—OBJECT ORIENTED CONCEPTS AND C++

(2005 admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

*Answer any **five** questions.
Each question carries 8 marks.*

1. "Anything in the nature can be represented as classes and objects". Comment with suitable examples.
2. What are container classes ? Explain its applications.
3. Define a class string and overload the operators + and << for the operations-concatenation of two strings and display the string respectively.
4. What do you mean by binding ? Explain different types of binding techniques with examples.
5. What are the characteristics of Unified Modelling Language ? Explain the importance of such a language in software engineering.
6. What is accidental multiple inheritance. Suggest one method to avoid it.
7. Is there any relationship between ER diagram and class diagram ? **Justify** your comment with suitable **example(s)**.

(5 x 8 = 40 marks)

Part B

*Answer any **four** questions.
Each question carries 10 marks.*

8. C ++ is not a complete Object oriented Programming Language. Why ?
9. What are the differences between inheritance and nested classes ? What is meant by hybrid inheritance ? Discuss the issues in hybrid inheritance.
10. Write a program that will accept a file name and a word as command line argument and return the number of occurrence of that particular word in that file.
11. "Things are the basic building blocks in UML"—**Explain.**
12. Construct and explain an even-trace diagram for an ordinary telephone call.
13. What do you mean by coupling between classes ? How can you derive from CRC cards ? What is the significance of it in software design ?

(4 x 10 = 40 marks)