D 10835 (Pages : 2) Name

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2011

CSC 1 C03—OBJECT ORIENTED CONCEPTS AND C++

(2010 admissions)

Time : Three Hours Maximum Weightage : 36

I. Answer ***all*** questions :

1 Define object identity.

2 Give the purpose of messages.

3 Define objects.

4 List merits and demerits of inline functions.

5 Explain new and delete operators.

6 Give the significance of constructors and destructors.

7 Write a statement that will read the contents of an ifstream object called ifile into an array called buffer.

8 What do you mean by containers ?

9 Explain the use of file pointers.

10 Give the importance of UML in object oriented software design.

11 Discuss the approaches for identifying classes.

12 List steps in the design of interface objects.

(12 x 1 = 12 weightage)

II. Answer any *six* questions :

13 With suitable example explain "encapsulation".

14 Give a suitable example illustrating the need for friend function.

15 Explain polymorphism.

16 What advantage does STL provides ? Explain.

17 Give the steps in the overloading of a unary operator.

18 Explain string I/0.

19 Give a suitable example illustrating object interaction diagram.

20 Explain "state" and "activity" diagrams.

21 Explain component and deployment diagram.

(6 x 2 = 12 weightage)

Turn over

III. Answer any *three* questions :

22 Give a detailed account of inheritance.

23 With suitable example, explain exception handling in C++.

24 Illustrate with examples class templates and function templates.

25 With, examples explain class diagram.

26 Discuss the basic principles of object oriented design.

27 Write notes on :

(a) Software testing and maintenance.

(b) Data management design.

(3 x 4 = 12 weightage)