00880

DCSVI

Term-End Examination

June, 2013

BICSE-005 : OBJECT MODELING AND DESIGN

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt **any five** questions. Question **No. 1** is **Compulsory.** Each question carry **equal** marks.*

1. (a) Class diagram at conceptual level should include : **7x2=14**

(i) Attributes only

(ii) Operations only

(iii) Both Attributes and operations

(iv) None of above

(b) Constraints can be represented in UML by :

(i) [text string]

(ii) {text string}

(iii) Notes

(iv) Constraint

(c) Which of the following is not a UML level of visibility ?

(i) Private (ii) Protected

(iii) Public (iv) Persistent

(d) Which diagram depicts how object collaborate in message sequence to satisfy the functionality of a use case ?

(i) State (ii) Component

(iii) Sequence (iv) Deployment

(e) Attribute and methods that are visible from any method in any class are said to be :

(i) Private (ii) Protected

(iii) Public (iv) None of above

(f) A dependency relationship is illustrated with a dashed arrow line (True / False)

(g) Two goals of object - oriented design are high coupling and low cohesion (True / False)

2. (a) Define Object Oriented Modeling (OOM). Describe various steps involved in OOM process. 7

(b) Describe unified software development life cycle. 7

3. (a) Differentiate between abstract class and interface. 7

(b) Draw a class diagram for a hypothetical system for college canteen. Make suitable assumptions. 7

4. (a) Describe activity diagram with various terms and concepts. 7

(b) Draw an activity diagram for Hospital Management System. 7

5. (a) What do you understand by architectural Modeling ? Explain its various concepts and diagram with the help of suitable example. 7

(b) Define use case diagram and discuss their utility in system design with the help of suitable example. 7

6. (a) Describe components. How are they used ? 7

(b) Describe deployment diagram in brief and draw deployment diagram for library management system. 7

7. (a) Explain interaction diagram and its classification with diagram. 7

(b) Describe Generalization and specialization in brief with the help of diagram. 7

8. Write short notes on the following *(any four)* : 3.5x4=14

(a) Event and Signals.

(b) State Machines

(c) State chart diagram

(d) Package diagram

(e) Modelling techniques

(f) Processes and threads