

DCSVI
Term-End Examination
December, 2012

BICSE-005 : OBJECT MODELING AND DESIGN

Time : 2 hours

Maximum Marks : 70

*Note : Attempt **any five** questions.*

*Question No. 1 is **mandatory**.*

1. State T/F : **2x7=14**
- (a) The use of UML guarantees that the targeted system conforms to object oriented principles.
 - (b) Activity diagram can be used to depict work flow for a particular business activity.
 - (c) A use case must be initiated by an actor.
 - (d) Multiple classification is similar to multiple inheritance.
 - (e) Aggregation is a special kind of Association.
 - (f) Package dependency and class dependency are not the same.
 - (g) State machine diagram is a behavioural modeling diagram.
2. How is object oriented modeling differs from procedure oriented ? Explain with example. **14**

3. (a) Explain different relationships used in class diagram with example. $7 \times 2 = 14$
(b) Differentiate between aggregation and composition in class diagram and explain them with the help of diagram.
4. (a) Demonstrate the significance of package diagram in structural modeling with example. $7 \times 2 = 14$
(b) Explain visibility modes of class diagram with example.
5. (a) Explain the concept of swim lanes in activity diagram with example. $7 \times 2 = 14$
(b) Draw a use case diagram for the working of an ATM machine.
6. (a) Draw a state machine diagram for the working of a coffee machine. $7 \times 2 = 14$
(b) Define event and describe its various classifications.
7. (a) Draw a deployment diagram representing nodes and artifacts. $7 \times 2 = 14$
(b) Describe component diagram in detail with the help of diagram.
8. Write short notes on following : (*any 4*) $3.5 \times 4 = 14$
(a) Principle of modeling
(b) Stereotypes
(c) Collaboration Diagram
(d) Active class
(e) UML features
(f) Bidirectional Association
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