Total No. of Questions :8]   [Total No. of Printed Pages :2

Roll No ....

MCIT-103

M.E./M.Tech., I Semester

Examination, December 2016

Object Oriented Technology

Time : Three Hours

Maximum Marks : 70

Note: i)   Attempt any five questions.
      ii)   All questions carry equal marks.

1. a)   What is the difference between ADT and Object class? How can you implement ADT as object class? Give an example.   7

   b)   What do you mean by reusability? How it is useful? Discuss it in case of C++.   7

2. a)   Prepare a data flow diagram for computing the volume and surface area of cylinder. Inputs are height and radius of the cylinder. Outputs are volume and surface area. Discuss several ways of implementing the data flow diagram.   7

   b)   Explain use case diagram and its purpose? Draw diagram for issuing a book from library management system.   7

3. a)   What is UML and its need? Name basic building blocks of UML? Discuss in detail the basic architecture of UML.   7

   b)   What kinds of errors do you make if you directly rush to the implementation phase of the software project? How do you decide which classes, association and generalization should be eliminated?   7

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4. a)   Describe what do you understand by Object Model. Define its various elements. Also, write its merits and demerits.   7

   b)   Differentiate between attributes and association. What are associative classes? When it is useful to model an association as a class?   7

5. a)   What do you understand by distributed objects? What are the methods to invoke remote objects?   7

   b)   Write the different phases of unified development process. Explain each of them briefly.   7

6. a)   Describe Object Oriented Database system development with use case driven approach? Illustrate with neat sketch.   7

   b)   What are query languages for Object Oriented Database? Elaborate your answer using suitable example.   7

7. a)   Differentiate between Object Oriented Database and Relational Database.   7

   b)   Describe about Object-Oriented Database system data model.   7

8. Explain the following term in the context of link and association.   14
   a)   Link Attribute
   b)   Modeling an Association as a class
   c)   Role name
   d)   Ordering

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