IT-701
B.E. VII Semester
Examination, December 2016
Object Oriented Analysis and Design

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation. Design and Drawing etc.

Unit- I

1. a) Define Global and Local Object.

b) Define polymorphism.

c) Discuss various merits and demerits of object oriented approach.

d) Explain the anti-symmetric and transitive properties of aggregation.

OR

How does object-oriented approach differ from the object-based approach? Explain.

Unit - II

2. a) Draw and explain the state diagram of a telephone call system.

b) What do you understand by Object Diagram?

c) What are the principles of modeling?

d) Prepare a dataflow diagram for computing the volume and surface area of a cylinder. Inputs are the height and radius of the cylinder. Outputs are volume and surface area. Discuss several ways of implementing the Data Flow Diagram.

OR

Draw OMT object model for participant's registration system for seminar.

Unit - III

3. a) What is Physical Packaging?

b) What is the used of design optimization?

c) Why is it necessary to have a variety of diagrams in a model of a system?

d) What is OMT approach to design a system? What are different stages of OMT? Explain.

OR

Write in short various types of design of Association.

Unit - IV

4. a) What is Constructor?

b) Define Abstraction.

c) Explain the significance of data hiding with an example.

d) Write a brief notes on Documentation characterization of object oriented languages.

OR

Write similarity and differences between C++ and Java.

Unit-V

5. a) What is Object Oriented Database?

b) What is UML? Discuss importance of UML.

c) What are the contents, common properties and common uses of use case diagrams?

d) Define Class Diagram? What is the purpose of class diagram? Describe icons used for class relationships.

OR

Draw a use case diagram to model the behavior of a cellular phone. Explain briefly.

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