

MCA (Revised)**Term-End Examination**

02760

December, 2017**MCS-032 : OBJECT ORIENTED ANALYSIS AND DESIGN***Time : 3 hours**Maximum Marks : 100*

Note : Question no. 1 is **compulsory**. Attempt any **three** questions from the rest.

1. (a) Explain the concept of objects with an example. Also, explain the differences between aggregation and generalization. 10
- (b) Explain any two types of integrity constraints. How do we implement the concept of association ? Explain with an example. 10
- (c) Draw a state diagram for a Railway Reservation System and explain the sequence of states in the diagram. 10
- (d) Explain dynamic modeling with the help of an example and diagram. 10

2. (a) Explain the process of storing a persistent object in the case of an object oriented database with the help of an example. 10
- (b) Draw DFDs (Level-0 and Level-1) for a "Hotel Management System". 10
3. (a) Briefly explain any four UML structural diagrams. 10
- (b) Explain four shortcomings in the structured approach of system design, which are addressed by object oriented design. 10
4. (a) How do you map ternary associations to tables ? Explain with an example. 10
- (b) What is an Activity Diagram ? Draw an activity diagram for email encryption. 10
5. (a) What is Aggregation ? Why is it called a special kind of association ? Explain with the help of an example. 10
- (b) What is Generalization ? Explain how generalizations are mapped to tables, with the help of an example. 10
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