

Roll No .....

**MSE-205**

**M.E./M.Tech., II Semester**

Examination, December 2016

**Object Oriented Analysis and Design**

*Time : Three Hours*

*Maximum Marks : 70*

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

1. a) What is Object Oriented Modeling? Explain characteristics of Object Oriented Modeling.  
b) What are the three models involved in OMT? Define each one of them.
2. a) What is Object? Discuss the main characteristics of the object with examples from the real world.  
b) Define UML. Explain modeling using interaction diagram.
3. a) How can you combine object model, dynamic model and functional model to obtain operations on classes?  
b) Define Association. Discuss the characteristics and OMT notations of the association.
4. a) Define the following concepts with examples and their notations:  
State, Event, Transition, Action and Activity.  
b) Draw an event-trace diagram for withdrawing money from ATM.

5. a) Distinguish between the following:  
i) Action and Activity  
ii) Initial and Final states  
b) What is Data flow diagrams? Explain features of a DFD.
6. a) What is relational database normalization? Why is a database schema in third normal form considered to be of higher quality than an unnormalized schema?  
b) How is a class on a class diagram represented in a relational database? Explain with example.
7. a) List and briefly describe the three basic approaches to program development order. What are the advantages and disadvantages of each?  
b) What is Deployment? Explain the component and deployment diagram.
8. Write short note on any three:  
i) Use case diagram  
ii) Sequence diagram  
iii) State diagram  
iv) Functional model  
v) UML

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