T.E. (I.T) Sem I (R)

(REVISED COURSE)

Object Oriented Analysis & Design

SP−8642

(3 Hours)

[Total Marks : 100

29/12/09

2.30 to 5.30

N. B. : (1) Question No. **1** is **compulsory**.

(2) Attempt any **four** questions out of remaining **six** questions.

(3) Make **suitable** assumptions whenever **necessary** and state **them**.

1. Assume that you are working as a senior developer in a multinational company. The **20** role is that you need to transform the following customers mission statement into a complete unambigous description of the system using use-case diagram and class diagram.

    Mahindra Car Rental company mission statement–Since we automated the tracking of cars at our stores—Using bar codes, counter top terminals and laser readers. We have seen many benefits : the productivity of our rental assistants has increased 20% car rarely go missing and our customer has grown strongly. The management feels that internet offers further existing opportunities for increasing efficiency.

2. Explain the following terms using scenario described in question No. 1. **20**

    (a) Aggregation

    (b) Generalization

    (c) Association

    (d) Multiplicity.

3. (a) Explain the different types of test scenarios for inventory management system. **10**

    (b) What is the difference between uses and extends ? **5**

    (c) What is model ? Why do we need to model a problem ? Briefly describe static **5** model and dynamic model ?

4. (a) What is requirement ? Explain the types of requirements in detail. **10**

    (b) What are the design principles ? Explain difficulties and risks in design. **10**

5. (a) Define Inspection. Describe principles of inspection in detail. **10**

    (b) State and explain various steps in object oriented design process. **10**

6. (a) Construct the activity diagram for trading system which should take care of sales **10** in formation of the company and must analyze the potential of trade.

    (b) Construct the component diagram for the above scenario. **10**

7. (a) Write detailed note on "Framework and Components". **10**

    (b) How deployment diagrams are useful in modelling a fully distributed system ? **10**