IMCA – 62

VI Semester Int. M.C.A. Examination, February/March 2010
OBJECT ORIENTED ANALYSIS AND DESIGN

Time: 3 Hours Max. Marks: 100

Instructions: *1) Answer **all** questions in Part – **A**, **5** out of 8 in Part – **B**, and **4** out of 6 questions in part – **C**.*
*2) Part – **A** : Questions from **1 to 8** carry **1** mark and **9 to 14** carry **2** marks **each**.*
*3) Part – **B**: **Each** question carries **8** marks.*
*4) Part – **C**: **Each** question carries **10** marks.*

PART – A

1. What is an object ?
2. What is data encapsulation ?
3. What do you mean by dynamic binding ?
4. What is classification ?
5. What is UML ?
6. Define polymorphism.
7. What is meant by Design Pattern ?
8. What is Fly Weight Pattern ?
9. Explain Object Oriented Analysis.
10. Explain state pattern.
11. Explain builder pattern.
12. Explain command patterns.
13. Explain polymorphic messages.
14. What do you mean by RUP and XP ?

P.T.O.

PART – B

1. Explain the importance of abstraction with example.
2. What is association and aggregation ? Give their respective UML notations with example.
3. Explain Object –Oriented Analysis and design with example.
4. Explain how an object oriented program works.
5. What is typecasting? Explain with example, in which situation you may require to do typecasting.
6. What do you mean by template ? Explain the advantages of template with example.
7. Write activity diagram for car reservation.
8. Write class diagram for icoot .

PART – C

1. What is Inheritance? Explain super class and subclass with example and indicate the same with UML diagram.
2. Explain the stages of software development.
3. Explain three software development process models.
4. What do you mean by design patterns ? Explain three different category patterns.
5. How to write the Business Use Cases ? Write use case diagram for icoot.
6. Write state and sequence diagram for car reservation.