## RGPVONLINE.COM-----

## IT-701

### **B.E. VII Semester**

Examination, December 2013

# Object Oriented Analysis & Design

Time: Three Hours

Maximum Marks: 70

Note: Attempt all questions. Each question carry equal marks.

- 1. a) Describe the mechanism of accessing data members and member functions in the following cases:
  - Inside the main program
  - Inside a member function of the same class
  - Inside a member function of another class.
  - b) What are the different forms of inheritance? Give an example of each.

#### OR

- 2. a) How is Polymorphism achieved at
  - Compile time, and
  - Run time
  - b) In what order are the class constructor's called when a derived class object is created?
- 3. a) Define relationship. Explain the four adornments that apply to an association.
  - b) Enumerate the steps to model single inheritance.
  - .c) Enumerate the steps to model using relationship.

OR

4. a) Draw a class diagram of business objects in the design model and explain.

- b) Enumerate the steps to model inner process communication
- c) What is object diagram?
- 5. a) A retail system will interact with customers who place and track orders. Give UML diagram that uses various use cases.
  - b) Enumerate the properties of well-structural use case.
  - c) Define use case. Enumerate the steps to model the behaviour of an element.

OR

- 6. a) Define interaction. What is the significance of context in interactions?
  - b) What are the various adornments to ends of links denoted as standard stereotypes? Explain about objects and roles.
- 7. a) Giving appropriate illustrative UML diagrams, enumerate the steps to model the following:
  - i) Physical data base ii) Source code
  - b) Explain the following parts of a transition
    - i) Event trigger. ii) Guard condition.

OR

- 8. a) Draw and explain sequence diagram for the search facility of the objects, so that "wild card" characters can be used when searching for titles, authors, or borrowers.
  - b) Write Java program for the search facility.
- 9. a) Write a Java program for the Loan class
  - b) Draw a deployment diagram for the library system
  - c) Draw activity diagram to inform a person when a loan is due.

OR

- 10. Describe the following with suitable diagram:
  - a) Activity diagram

1T-701

- b) Component diagram
- c) Deployment diagram
- d) Use case diagram

## RGPVONLINE.COM

IT-701 PTO