



Code No: 823AB

**R15****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, January - 2018****OBJECT ORIENTED ANALYSIS AND DESIGN USING UML****Time: 3hrs****Max.Marks:75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART - A****5 × 5 Marks = 25**

- 1.a) Define OOAD? Mention the properties of OOAD. [5]
- b) Name all types of OOAD diagrams. [5]
- c) What are the duties of interaction diagram? [5]
- d) Differentiate process and Thread. [5]
- e) What is a framework? [5]

**PART - B****5 × 10 Marks = 50**

2. Explain the various phases of software development life cycle. [10]

**OR**

3. What are the common mechanisms in the UML? State and explain various object oriented concepts. [10]

4. Distinguish between collaboration and sequence diagrams. Discuss about polymorphism in collaboration diagrams. [10].

**OR**

5. What are the common modeling techniques for class diagram? Explain with an example. [10]

6. What are interaction diagrams? Discuss their significance and common modeling techniques. [10]

**OR**

7. Discuss about capturing of use cases, design and implementation to realize the use cases. [10]

8. What is the relationship between a component and a node? Discuss the common modeling techniques of component diagrams. [10]

**OR**

9. Contrast action with activity. Define state and event. What are the various parts of a state? Explain briefly. [10]

10. Explain in detail about the artifacts diagrams with an examples. [10]

**OR**

11. Draw the use case diagram and write use case descriptions of the Unified Library application. [10]

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