



Code No: 823AB

**R15****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, August - 2017****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) What are principles of modeling? Explain. [5]
- b) Explain about modeling simple collaborations. [5]
- c) Discuss about modeling an operation. [5]
- d) Write terms and concepts of events and signals. [5]
- e) How to model architectural patterns? Explain. [5]

**PART - B****5 × 10 Marks = 50**

- 2.a) Give an overview of UML.
  - b) Explain about extensibility mechanisms in the UML. [5+5]
- OR**
- 3.a) Discuss in detail about software development life cycle.
  - b) What are common mechanisms in the UML? Explain. [5+5]

- 4.a) Discuss about modeling groups of elements.
- b) Explain terms and concepts of diagrams. [5+5]

**OR**

- 5.a) Describe advanced concepts association and generalization.
- b) Explain about modeling object structures. [5+5]

6. Discuss about terms and concepts of interactions. [10]

**OR**

- 7.a) Explain about modeling requirements of a system.
- b) Discuss about modeling flows of control by time ordering. [5+5]

- 8.a) Explain about modeling multiple flows of control.
- b) Discuss about modeling an executable release. [5+5]

**OR**

- 9.a) Explain about modeling the distribution of components.
- b) Describe modeling an embedded system. [5+5]

10. Draw the following diagrams for unified library application:  
a) Use case diagrams    b) Interaction diagrams [5+5]

**OR**

11. Explain in detail about artifact diagrams with examples. [10]

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