

Code No: 813AN

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**MCA III Semester Examinations, January - 2018****OBJECT ORIENTED ANALYSIS AND DESIGN (USING UML)****Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART - A**5 × 4 Marks = 20**

- 1.a) Explain the importance of modeling. [4]
- b) Enumerate the steps to model the vocabulary of a system. [4]
- c) Explain use case diagram with an example. [4]
- d) What are the characteristics of component diagrams? [4]
- e) Who are the actors involved in the library system? [4]

PART - B**5 × 8 Marks = 40**

2. Explain the categories of building blocks in the UML. [8]
- OR**
3. Explain the software development life cycle of UML. [8]
- 4.a) What is the use of forward engineering and reverse engineering UML diagrams? [4+4]
- b) Explain the common mechanism of UML. [4+4]
- OR**
- 5.a) Draw an object diagram for a school management system. [4+4]
- b) What is mean by classifier? Explain various types of classifier. [4+4]
6. What is meant by message sequencing? Discuss its importance and also explain how it will be done when active objects are involved in an object interaction diagram. [8]
- OR**
- 7.a) Differentiate between collaboration and sequence diagrams. [4+4]
- b) Write a short notes on forking and joining. [4+4]
- 8.a) Explain history states. [4+4]
- b) How do you model an operation? Explain with an example. [4+4]
- OR**
- 9.a) Enumerate the steps to model the lifetime of an object. [4+4]
- b) Discuss about state chart diagrams. [4+4]
10. Draw the behavioral diagrams for unified library application and explain them briefly. [8]
- OR**
- 11.a) Discuss about frameworks. [4+4]
- b) Explain in detail about test and deployment. [4+4]