

Code No: 126EQ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, May - 2016

OBJECT ORIENTED ANALYSIS AND DESIGN

(Common to CSE, IT)

Time: 3 hours

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****(25 Marks)**

- 1.a) What is an artifact? [2]
- b) What are the adornments in the UML? [3]
- c) What is navigation? [2]
- d) Explain the levels of visibility. [3]
- e) What is use case diagram? [2]
- f) What are interaction diagrams? [3]
- g) What is a component? [2]
- h) What is a deployment diagram? [3]
- i) What are the common uses of deployment diagrams? [2]
- j) What are the three kinds of components? [3]

**PART - B****(50 Marks)**

- 2.a) What are behavioral things? Explain.
- b) What is UML? Where can the UML to be used? [5+5]

**OR**

- 3.a) What are the principles of modeling? Explain.
- b) Draw the architecture of a software-intensive system and explain. [5+5]

- 4.a) What are the various kinds of Classifiers? Explain.
- b) How to model the seams in a system? [5+5]

**OR**

- 5.a) Explain about generalization with an example.
- b) Describe interfaces, types and roles with examples. [5+5]

- 6.a) Explain about use cases and actors and use cases and flow of events.
- b) How to model a flow of control? [5+5]

**OR**

- 7.a) Explain sequence diagram with suitable example.
- b) How to model the requirements of a system? [5+5]

8.a) Explain the following:

- i) History states
  - ii) Time and space
- b) How to model an API?

[5+5]

OR

9.a) How to model an embedded system?

- b) Differentiate the following:
- i) Components and classes
  - ii) Nodes and components.

[4+6]

10. Explain the following:

- a) Patterns and architecture
- b) Modeling an executable release.

[5+5]

OR

11. Draw the following diagrams for the unified library application:

- a) Class diagrams
- b) Interaction diagrams.

[5+5]

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