

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]