

PART-A

10 x 2 = 20

1. What do you understand by model?
2. What is abstraction?
3. What is domain model?
4. What is an use case?
5. Define: aggregation
6. What are the steps in use case driven OOAD methodology?
7. What do you understand by programming in large?
8. What is reusability?
9. What is a design pattern?
10. What is meant by software architecture?

PART-B

5 x 16 = 80

11. a What is modeling? Explain in detail about the various modeling techniques used to build large software systems 16
- 12a. Explain with example how use case modeling is used to describe functional requirements. Indicate and identify scenario, actors and use cases in your illustration 16
- (OR)
- 12b. Explain with an example about the relationship between sequence diagrams and use cases 16
- 13a. Draw a dataflow diagram for computing the volume and surface area of a cylinder. The inputs are height and radius of the cylinder. 16
- (OR)
- 13b. Draw the UML diagram for the following scenario: A customer enters a departmental store with many sales counters and many cash counters in which articles may be billed from any cash counter. However the sales commission is to be accounted for the corresponding sales person. The cash counters can accept both cash and credit /debit cards. After the receipt of money, articles purchased are verified and delivered. Draw all necessary diagrams with attributes, associations and methods involved. Use your discretion for better solution. 16
- 14a. Assume that an UML diagram is given, explain in detail about various approaches for identifying classes and list out important features of each step in classification 16
- (OR)
- 14.b Discuss in detail about UML deployment and component diagrams for a banking application 16

15 a. Explain the advantages of design methodology by employing patterns and templates 16

(OR)

15b. Explain in detail about various architectural patterns that are applied in design 16