

Object Oriented Modeling

P. Pages : 2

Time : Three Hours



KNT/KW/16/7344

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Illustrate your answers wherever necessary with the help of neat sketches.
 9. Due credit will be given to neatness and adequate dimensions.

1. a) What is meant by object - orientation? Discuss the various stages of OMT. 7
- b) Explain abstraction, encapsulation and Inodularity. 6

OR

2. a) Explain architecture of UML in detail. 7
- b) Differentiate Aggregation and Generalization. 3
- c) Explain various principles of modelling. 3
3. a) Prepare an object diagram for following object classes, with association names where needed and you may add additional object classes: 8
Object classes : school, play - ground, principal, school-board, class-room, book, student, teacher, rest-room, computer, desk, chair, ruler, door, swing.
- b) Write short notes on abstract classes and concrete classes. 6

OR

4. a) Explain call back mechanism in detail. 6
- b) Prepare a class diagram for library management system. 8
5. a) Define use cases. Draw use case diagram for university course registration system. 7
- b) Define process and Thread. Explain different thread models. 6

OR

6. a) What are different components of E-R diagram. 4

- b) Write short notes on **any three**. 9
- i) Time diagram.
 - ii) Activity diagram.
 - iii) Package diagram.
 - iv) Sequence diagram.
7. a) Describe various parts of component diagram. 7
- b) Write a procedure for deployment diagrams. 6

OR

8. Describe Architectural modeling in detail. 13
9. a) Explain with example:- 14
- i) Use case driven.
 - ii) Architecture centric.
 - iii) Iterative and Incremental.

OR

10. a) Describe testing the use cases in detail. 7
- b) Explain the concept of implementation to realize the use cases. 7
11. a) What is the need of architecture and use cases? 6
- b) Explain architecture view of the design model of Railway reservation system. 7

OR

12. Write in detail Unified library application. 13
