



CBCS SCHEME

17CS551

Fifth Semester B.E. Degree Examination, Aug./Sept. 2020 Object Oriented Modeling and Design

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What is Object Orientation? Explain its aspects with example. (08 Marks)
b. Explain Object Oriented themes. (06 Marks)
c. Briefly explain three models used in OO modeling and Design. (06 Marks)

OR

- 2 a. Define the following terms with example:
i) Link and association ii) Multiplicity iii) Visibility (06 Marks)
b. Explain Modeling concept. Write the class model of windowing system. (10 Marks)
c. Write a note on Reification. (04 Marks)

Module-2

- 3 a. What is Use Case diagram? Mention its uses. (05 Marks)
b. Draw and explain the use case diagram of order entry subsystem for RMD and all use cases involving the customer actor. (07 Marks)
c. Explain intermediate use case description with example. (08 Marks)

OR

- 4 a. What is the use of system sequence diagram? Explain SSD notations with neat sample system sequence diagram. (10 Marks)
b. Explain all the necessary steps for developing Orderitem state chart. (10 Marks)

Module-3

- 5 a. Explain the Software development stages in detail. (10 Marks)
b. Describe the steps in constructing a domain state model. (10 Marks)
- 6 a. Explain Waterfall development and iterative development life cycles. (06 Marks)
b. Describe different ways of finding new system concept. (06 Marks)
c. Explain an overview of domain analysis. (08 Marks)

Module-4

- 7 a. Explain the overview of object oriented programs with neat diagram. (06 Marks)
b. Describe the object oriented design models. (08 Marks)
c. Explain the responsibilities of class objects with Look up item availability use case. (06 Marks)

OR

- 8 a. Illustrate four types of standard design classes. (06 Marks)
b. Explain how to update the design class diagram. (06 Marks)
c. Discuss the implementation issues for three-layer design. (08 Marks)

Module-5

- 9 a. What is design pattern? Explain four essential elements of design pattern. (08 Marks)
b. Explain how to select a design patter. (06 Marks)
c. Briefly explain how to use a design pattern. (06 Marks)

OR

- 10 a. List any five design problems and explain how design patterns solve them. (10 Marks)
b. Explain the consequences of Singleton and adaptor patterns. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.