

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

15CS551

Fifth Semester B.E. Degree Examination, June/July 2023 Object Oriented Modeling and Design

Time: 3 hrs.

Max. Marks : 80

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

Module-1

- 1 a. What is object-oriented model? Explain the important characteristics of object oriented approach. (08 Marks)
- b. What are links and associations? Write and explain UML notation for links and association with an example. (08 Marks)

OR

- 2 a. Define reification. Explain it with a diagram. (08 Marks)
- b. What is aggregation and composition? Give their respective UML notations with an example. (08 Marks)

Module-2

- 3 a. Explain Object Oriented Requirement definitions in detail. (07 Marks)
- b. What is the purpose of SSD and also explain its notations with an example. (07 Marks)
- c. Define usecase and actor. (02 Marks)

OR

- 4 a. List and explain the steps for developing state charts. (08 Marks)
- b. Define concurrent state and brief the details of concurrent state by taking an example of printer. (08 Marks)

Module-3

- 5 a. List out the ways to find New system concepts, and explain the system concepts of ATM case study. (08 Marks)
- b. List and explain the Criteria's for keeping the Right classes in domain class model with an example. (08 Marks)

OR

- 6 a. Describe the steps for constructing an domain state model with suitable example. (08 Marks)
- b. What is software development process? Explain the stages of software development process. (08 Marks)

Module-4

- 7 a. Briefly explain the steps involved in design the class design. (08 Marks)
- b. Illustrate the concept of bridging the gap to design. (08 Marks)

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.

OR

- 8 a. Describe the detailed steps of design by use case realization. (08 Marks)
b. List the primary responsibilities of view layer, domain layer and data access layer. (08 Marks)

Module-5

- 9 a. What is a design pattern? Describe design patterns. (08 Marks)
b. Explain Prototype. (08 Marks)

OR

- 10 a. Explain how design patterns solve design problems. (08 Marks)
b. Explain Proxy pattern. (08 Marks)

* * * * *