

# CBCS SCHEME

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15CS551

## Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020 Object Oriented Modeling and Design

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. List and explain the stages involved in OO – methodology. (08 Marks)  
b. Explain briefly three models used to describe a system. (08 Marks)

OR

- 2 a. Explain with a neat diagram, how an association class participate in another association. (08 Marks)  
b. What is an association end? What are the different properties of end? (08 Marks)

### Module-2

- 3 a. Explain the requirement diagrams with UML models. (08 Marks)  
b. Explain three different levels of use-case detailed description. (08 Marks)

OR

- 4 a. What is SSD? What are the steps to develop SSD based on activity diagram? (08 Marks)  
b. What is the purpose of statechart? List the primary steps for developing a state chart. (08 Marks)

### Module-3

- 5 a. List and explain sequence of software development stages. (08 Marks)  
b. Design the initial class diagram for ATM system. (08 Marks)

OR

- 6 a. Explain the steps to construct the domain state model. (08 Marks)  
b. How are classes identified in domain class model? Briefly explain. (08 Marks)

### Module-4

- 7 a. Define object responsibility. Explain it briefly. (08 Marks)  
b. What is an objective of use-case controller class? Explain the ways to create it. (08 Marks)

OR

- 8 a. What are the three steps to be followed in developing first cut sequence diagram? Explain Briefly. (08 Marks)  
b. Write a short note on following : (08 Marks)  
i) Design class symbols ii) Design class notation.

### Module-5

- 9 a. Define design pattern. Explain essential elements of design pattern. (08 Marks)  
b. Explain the process of how design pattern solve design problem. (08 Marks)

OR

- 10 a. Explain the process of how to use and how to select the design pattern. (08 Marks)  
b. Explain in detail adopter design pattern. (08 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.

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