

CBCS SCHEME

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15CS551

Fifth Semester B.E. Degree Examination, June/July 2019 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 OO development? What are OO themes explain? (06 Marks)
 b. Define model. Mention its purposes. Explain types of models. (05 Marks)
 c. Explain multiplicity with class model. (05 Marks)

OR

- 2 a. Explain generalization and inheritance with example. (06 Marks)
 b. What is aggregation explain with example? (05 Marks)
 c. Write a class model of windowing system. (05 Marks)

Module-2

- 3 a. Define use case and actor. Explain use case diagram for order process and scenarios. (06 Marks)
 b. Define the System Sequence Diagram (SSD). Explain the simple system sequence diagram. (05 Marks)
 c. Write simplified activity diagram of the telephone order scenario. (05 Marks)

OR

- 4 a. Define state chart. Explain simple state chart for a printer. (06 Marks)
 b. Write and explain state chart for order item. (05 Marks)
 c. Explain nested states and concurrency. (05 Marks)

Module-3

- 5 a. Define process overview and explain software development process. (08 Marks)
 b. Explain system conception and elaborate with ATM example. (08 Marks)

OR

- 6 a. Describe the steps for construction domain class model of an ATM system. (08 Marks)
 b. Describe data dictionaries for an ATM. (08 Marks)

Module-4

- 7 a. Describe: i) Design class notation ii) Fundamental design principles. (08 Marks)
 b. Explain developing the first-cut RMO design class diagram for order item. (08 Marks)

OR

- 8 a. Explain designing the first cut sequence diagram for the look up item availability use case and mention its guidelines. (08 Marks)
 b. Describe the symbols of the communication diagram. Write a communication diagram for look up item availabilities. (08 Marks)

Module-5

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

OR

- 10 Write a note on: i) Prototype and singleton ii) Adaptor and proxy. (16 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.