



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

Max. Marks:100

**Note:** Answer any FIVE full questions, selecting at least TWO full questions from each part.

**PART - A**

- 1 a. What is Object-Oriented development methodology? Explain how the Object Oriented approach differs from traditional method or approach. (10 Marks)
- b. What are links and associations? Write WML notation for links and association and explain with an example. (10 Marks)
- 2 a. What is aggregation and composition? How is aggregation different from composition? Give their respective UML notations with example. (10 Marks)
- b. What is an event? Explain different types of events with example. (10 Marks)
- 3 a. How do you represent branching and concurrency in activity diagram? (10 Marks)
- b. Draw usecase diagram for vending machine. What are the guidelines needed to be followed whole drawing use case diagram. (10 Marks)
- 4 a. Explain the stages of software development which life cycle would you prefer in the development? Why? (10 Marks)
- b. Describe domain analysis with an example. (10 Marks)

**PART - B**

- 5 a. Discuss the steps followed in constructing application class model with the diagram. (10 Marks)
- b. Explain the architecture of the ATM system with diagram. (10 Marks)
- 6 a. Explain class design. Discuss the steps of a system design. (10 Marks)
- b. How do you choose association traversal? Explain with an example. (04 Marks)
- c. Write short notes on:
  - i) Forward Engineering
  - ii) Reverse Engineering
  - iii) Wrapping. (06 Marks)
- 7 a. What is pattern? Explain the Model View-Controller design pattern for software architecture. (10 Marks)
- b. Discuss the client dispatcher server design pattern. (10 Marks)
- 8 a. What are Forwarder-Receiver design patterns? Give the steps to implement a forward receiver design patterns. (10 Marks)
- b. What are Idioms? How they are helpful in selecting optimized solution for a given problem? (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.

