Fifth Semester B.E. Degree Examination, July/August 2021
Object Oriented Modeling and Design

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

1   a.   What is object oriented development? Explain.   **(08 Marks)**
    b.   What is Association class? Explain with neat diagram.   **(04 Marks)**
    c.   Explain Qualified Association with an example.   **(04 Marks)**

2   a.   Differentiate between Aggregation and Composition. Explain with an example.   **(08 Marks)**
    b.   Define Constraints. Explain it with neat diagrams.   **(08 Marks)**

3   a.   Briefly discuss the detailed object oriented requirements definitions with diagram. **(08 Marks)**
    b.   What is Activity Diagram? Draw a activity diagram of the web order scenario with explanation.   **(08 Marks)**

4   a.   Explain system sequence diagram notation with neat diagram.   **(08 Marks)**
    b.   What is state chart diagram? Explain nested states and concurrency with an example.   **(08 Marks)**

5   a.   Briefly discuss the different stages of software development process.   **(08 Marks)**
    b.   Explain how to prepare a problem statement in software development.   **(08 Marks)**

6   What are the steps involved to construct a Domain Class Model? Explain with diagrams.   **(16 Marks)**

7   a.   Explain object oriented design. The bridge between requirements and implementation with diagram.   **(08 Marks)**
    b.   Discuss the symbols, notation and design principles of design class diagrams.   **(08 Marks)**

8   a.   With diagram, explain communication diagrams.   **(08 Marks)**
    b.   What are the responsibilities of view layer, domain layer and data access layer? Explain with diagram.   **(08 Marks)**

9   a.   What is design pattern? Explain the four essential elements of pattern.   **(08 Marks)**
    b.   Briefly discuss how to select design pattern.   **(08 Marks)**

10   a.   With diagram, explain the object adapter class.   **(08 Marks)**
    b.   Briefly discuss about prototype pattern.   **(08 Marks)**

* * * * *