

B.Tech III Year I Semester (R13) Supplementary Examinations November/December 2017  
**OBJECT ORIENTED ANALYSIS DESIGN & MODELING**  
 (Information Technology)

Time: 3 hours

Max. Marks: 70

**PART – A**  
 (Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Is the design need to construct system? Discuss.
  - What are the different programming paradigms?
  - Define the aggregation of 2 objects with example.
  - What is CRC card? Where it is used?
  - Differentiate between association and dependency relationship.
  - Define include and extend relation in generalization.
  - How package constructed in UML?
  - Define advanced class with example.
  - What are the model roles in collaboration?
  - Define events and signals in UML.

**PART – B**  
 (Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 (a) Explain the topology of object based and object oriented programming languages.  
 (b) Discuss the benefits of object model.

OR

- 3 (a) What is the canonical form of a complex system?  
 (b) Why software is inherently complex? Justify.

**UNIT – II**

- 4 (a) Describe about nature of object and class.  
 (b) Discuss interplay of class and objects.

OR

- 5 Explain identifying key abstraction and mechanism in class or objects.

**UNIT – III**

- 6 (a) Discuss about common mechanism in UML with respective example  
 (b) Illustrate the modeling of system's architecture with a neat sketch.

OR

- 7 (a) What are the common modeling techniques of object diagram? Explain.  
 (b) Construct object diagram for library management system.

**UNIT – IV**

- 8 Discuss in detail about advanced relationships.

OR

- 9 (a) Explain modeling context of a system in use case diagram with neat sketch.  
 (b) Describe forward and reverse engineering techniques of use case diagrams.

**UNIT – V**

- 10 (a) Define organizing of components.  
 (b) Explain internal structure of components.

OR

- 11 (a) Describe modeling of work flow of activity diagram with an example.  
 (b) How do you justify the activity diagram is well structured?

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