

B.Tech III Year I Semester (R15) Regular Examinations November/December 2017

**OBJECT ORIENTED ANALYSIS & DESIGN**

(Common to CSE and IT)

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

- (a) Describe the structure of complex system using social institutions.
- (b) According to Levy what are the events that have contributed to the evolution of object-oriented concepts.
- (c) What is an operation? List the common kinds of operations supported by OO Concept.
- (d) Give brief description on the incremental and iterative nature of classification.
- (e) List some of the areas (at least 8) where UML is used.
- (f) Enumerate the steps to reverse engineer a class diagram.
- (g) What is a package? What are the owned elements present in it?
- (h) List the contents of use case diagrams.
- (i) What is activity diagram? What is its role in UML?
- (j) Write about the role of actions in Unified Modeling.

**PART – B**

(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 (a) List and explain the attributes of a complex system.
- (b) Write about the canonical form of a complex structure.

**OR**

- 3 (a) List the main kinds of programming styles along with their abstractions.
- (b) Write on the benefits, open issues and spectrum of object persistence.

**UNIT – II**

- 4 (a) Describe in detail about the relationship between objects. Explain with suitable example.
- (b) Write about the identification of key abstractions.

**OR**

- 5 With the help of suitable example, explain the relationship among the classes.

**UNIT – III**

- 6 (a) What are the rules that should be followed while building the UML diagrams?
- (b) List and explain the various common mechanisms that apply consistently throughout a language.

**OR**

- 7 Write and explain the various modeling techniques of typical classes.

**UNIT – IV**

- 8 What is composite diagram? What is its role in modeling? List and explain the components present in it? Explain the same by using Fibonacci sequence.

**OR**

- 9 Give brief description about the profile diagrams.

**UNIT – V**

- 10 (a) Distinguish between sequence and collaboration diagrams.
- (b) Generate a usecase diagram for interaction of a client within a restaurant (system).

**OR**

- 11 Draw and explain the state machine diagram for computer keyboard.

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