

# END TERM EXAMINATION

FIFTH SEMESTER [B.TECH.] DECEMBER 2017

Paper Code: IT-309

Subject: Object Oriented Software Engineering

Time: 3 Hours

Maximum Marks: 75

Note: Attempt all question as directed. Internal Choice is indicated.

Answer the following questions:

(5x5=25)

- Q1
- (a) What are primary and secondary actors? Give examples.
  - (b) What is the use of stubs and Drivers in testing?
  - (c) Discuss the types of relationships and associations in class diagrams.
  - (d) What is the difference between Sequence diagrams and Collaboration diagrams?
  - (e) Discuss the benefits of OOSE over traditional SE.

## UNIT-I

- Q2
- (a) Discuss various software development life cycle models. Write merits and demerits of all. (10)
  - (b) What are standards involved in software development? Enlist. (2.5)

OR

- Q3
- (a) What are the phases of Object Oriented Unified processing? Explain. (4)
  - (b) Differentiate between verification and validation. (3)
  - (c) What is the use of Requirement Elicitation? Explain at least two techniques used for requirement elicitation. (5.5)

## UNIT-II

- Q4
- (a) Is there any difference between USE CASE and SCENARIO? If yes/no, explain with the help of an example. (8)
  - (b) Construct a class diagram for student registration process in your university. (4.5)

OR

- Q5
- (a) What are the different types of objects in Analysis model? Consider the case study of a Recycling machine, where a user can deposit recyclable bottles, cans and crates. Once the depositor deposits the items, he gets printed receipt. Create and analysis models showing the different types of objects and interaction between different objects. (12.5)

## UNIT-III

- Q6
- Consider the ARENA multimedia case study (Virtual Techspace, where virtual gaming tournaments can be held, played or watched). Write the problem statement and draw state chart diagram. (12.5)

OR

- Q7
- Draw interaction diagrams (Both Sequence and Communication Diagrams) for ATM machine. (12.5)

## UNIT-IV

- Q8
- Explain any two of the following:- (6.25x2=12.5)
    - (a) Integration Testing
    - (b) State Based Testing
    - (c) Testing Process

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