



# SNS COLLEGE OF ENGINEERING

Kurumbapalayam (po), Coimbatore – 641 107



Accredited by NAAC-UGC with 'A' Grade

Approved by AICTE & Affiliated to Anna University, Chennai

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**23ITT203- OBJECT ORIENTED SOFTWARE ENGINEERING**

## UNIT 2

### Question bank

#### PART - A

1. Define **Requirement Analysis**.
2. What is the purpose of **Requirement Specification**?
3. List any two **requirements gathering techniques**.
4. Differentiate between **functional and non-functional requirements**.
5. What is an **SRS document**?
6. Mention any two **characteristics of a good SRS**.
7. Define **Formal System Specification**.
8. What is a **Finite State Machine (FSM)**?
9. What is a **Petrinet**, and where is it used?
10. List two advantages of using **Finite State Machines** in requirement modeling.
11. What is **Object Modelling** in UML?
12. Define **Use Case Model** with an example.
13. What is the role of an **actor** in a Use Case diagram?
14. Differentiate between **Association and Generalization** in Class Diagrams.
15. What is an **Interaction Diagram** in UML?
16. List any two components of an **Activity Diagram**.
17. What is the purpose of a **State Chart Diagram**?
18. Differentiate between **Data Flow Diagram (DFD) and Use Case Diagram**.
19. What are the different levels of **DFD**?
20. What are **CASE Tools**?
21. List any two advantages of using **CASE Tools** in software development.
22. What is the difference between a **Sequence Diagram** and a **Collaboration Diagram**?
23. Mention any two **symbols used in an Activity Diagram**.
24. What is **Functional Modelling** in Software Engineering?
25. What does the **zero-level DFD** represent?

## **PART – B**

1. Explain the different phases of Requirements Analysis and Specification with an example.
2. Describe in detail the different requirements gathering techniques. Provide real-world examples.
3. Write a detailed note on Software Requirement Specification (SRS) and its IEEE standard format.
4. Explain Formal System Specification and compare it with Informal Specification methods.
5. Discuss Finite State Machines (FSM) and Petrinets. How are they useful in system modeling? Provide suitable examples.
6. Explain Object Modelling using UML and discuss its advantages in software design.
7. Describe the Use Case Model with an example. Draw a Use Case Diagram for an online banking system.
8. Explain Class Diagrams, their components, and their importance in Object-Oriented Design. Draw a Class Diagram for an online shopping system.
9. Illustrate Interaction Diagrams with examples. Explain the difference between Sequence and Collaboration Diagrams.
10. Explain CASE Tools, their types, and their importance in Software Engineering. Discuss any two CASE tools in detail.