**Software Engineering Chapter-wise Question Bank**

**Chapter 1: Introduction to Software Engineering**

**CO1: Student will be able to understand and use basic knowledge in software engineering.**

**Bloom’s Taxonomy Levels: L1 = Remembering, L2= Understanding**

1. What is software engineering? (R)
2. Describe the layered structure of software engineering. How quality of can be affected by wrong selection of process, method & tool? (U)
3. Define Software engineering and explain software process framework. (R)
4. Differentiate between prescriptive & evolutionary models. (U)
5. Explain SCRUM agile development model. (U)
6. Explain in detail Spiral model and compare it with component model. (U)
7. What are different levels of CMM? (R)
8. Compare Agile and traditional software development methods. (U)
9. Explain Waterfall model and give its advantages & disadvantages. (U)
10. List evolutionary models and explain any one in detail.
11. Explain software process framework. (U)
12. Explain Agility principles. Explain XP agile development process. (U)
13. What is the need of creating models? Explain modelling principles. (R)
14. What is Agility? How agile development help develop quality software? (R)
15. Explain Spiral model and how prototyping is used in Spiral model? (U)
16. Is Agile process suitable for large scale projects? Mention few issues. (U)

**Chapter2: Requirement Analysis**

**CO2: Student will be able to identify requirements, analyze and prepare models.**

**Bloom’s Taxonomy Levels: L1 = Remembering, L2= Understanding, L3 = Applying**

1. Discuss functional & non-functional requirements. (A)
2. List out the requirements elicitation techniques. Explain any two methods. (U)
3. How important is requirement analysis? Elaborate on different requirement engineering tasks. (A)
4. What are different requirement engineering tasks? Why identifying software requirements is difficult? (R)
5. Discuss different types of software requirements giving appropriate examples. (A)
6. Discuss different ways of writing a system requirements specification. (A)
7. Write a note on requirements elicitation and analysis. (R)
8. Develop SRS for University Management System. (A)
9. Prepare SRS for Course Management System. (A)
10. Prepare SRS for Railway Reservation System. (A)
11. Prepare SRS for Online Job Recruitment System. (A)

**Chapter3: Software Estimation and Scheduling**

**CO3: Student will be able to plan, schedule and track the progress of the projects.**

**Bloom’s Taxonomy Levels: L1 = Remembering, L2= Understanding, L3 = Applying**

1. What is process and project metrics? Explain 4 P’s of software engineering. (R)
2. What is cost estimation? Explain LOC method. (R)
3. Elaborate COCOMO method of cost estimation. (U)
4. Differentiate between FP based and LOC based cost estimation techniques. (A)
5. List down the activities required for scheduling and tracking software projects. (R)
6. Examine different metrics for size estimation with their advantages and disadvantages. (A)
7. Write a note on Process & Project Metrics. (U)
8. Explain how size oriented metrics differs from functional oriented metrics. (U)
9. What is metric? Explain process & project metrics. (U)
10. Compare PERT & CPM. (A)
11. Discuss the different types of cost estimation model. (A)
12. Explain empirical estimation mode. (U)