

SE QUESTION BANK

UNIT-1

1. Define Software. Explain the characteristics of software compared to Hardware.
2. Explain various Software Myths and Reality.
3. Brief about evolving role of software?
4. Explain Waterfall Model with diagram. State its advantages and disadvantages.
5. Discuss software as a layered Technology.
6. Explain CMMI Model in detail?
7. Explain Spiral Model with Diagram?
8. Explain Agile Methodology?
9. Explain software development life cycle. Discuss various activities during SDLC.
10. Explain about the changing nature of software?

UNIT-2

1. Describe the structure of Software requirements specification document?
2. Illustrate with neat diagram about the process of Requirements Elicitation and Analysis?
3. Explain Requirement Discovery techniques with examples?
4. Explain Functional and Nonfunctional Requirements with example.
5. What are Behavioral Models? Explain with suitable example.
6. Define Requirements Engineering. Explain the importance of SRS document along with its contents?
7. Define Interface specification and its types?
8. Write about Requirement validation?
9. Explain in detail about Requirement Management?
10. Write about User, Domain and System Requirements?
11. Define Interface specification and its types

UNIT-3

1. Explain Design Engineering and objectives.?
2. What is Design and why it is important in software Development Process?
3. Explain Design Process and Design Quality?
4. Explain cohesion and coupling.
5. Explain Software quality guidelines and Quality attributes?
6. Write the taxonomy of architectural Design and give a brief description .
7. List and explain different kinds of architecture styles and patterns. ?[
8. Draw a use case diagram for Movie Booking System.
9. Draw a Use Case Diagram for Railway Ticket Booking ?
10. Explain class Diagram with an example?
11. Explain Collaboration Diagram with an example?
12. Explain the UML Building Blocks ?
13. List various diagrams of UML used to represent system modeling.?

Unit- 4

1. Explain about test strategies for conventional software?
2. Explain the difference between Black Box and White Box Testing?
3. Explain Metrics for Maintenance ?
4. Explain Metrics for Software quality ?
5. Explain metrics for software measurement?
6. Difference between Alpha and Beta testing ?
7. Difference between Verification & Validation?
8. What is black box testing? What is boundary value Analysis?
9. Define unit testing. Explain about unit testing considerations and procedures.
10. What is the need of software testing? What are its main objectives and principles?
11. Briefly discuss about Integration testing strategies

Unit-5

1. Define Risk. List out the different categories of risks that are likely to encounter when software is built.
2. What are Formal Technical Reviews? Explain.
3. What is RMMM? Explain various methods followed to mitigate monitor and manage the risks?
4. Explain the Process of Risk Projection in detail?
5. Explain Software reviews a. Defect Amplification and Removal
b. Cost Impact of Software Defects
6. Explain about ISO 9000 quality standards in detail.
7. Explain about a. software quality assurance (SQA)
b. Statistical Software quality assurance (SSAA)
8. Explain a. Risk Identification b. Risk Projection c. Risk Refinement
9. Explain The Factors That Affect Software Quality.
10. Explain Cyclomatic Complexity with an example?