

# SRINIVAS UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY MUKKA, MANGALURU

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

# **QUESTION BANK**

# **SOFTWARE ENGINEERING**

SUBJECT CODE: 19SCS44 2021-22

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# SOFTWARE ENGINEERING-19SCS44 QUESTION BANK

#### MODULE 1

- 1. Describe Software Crisis In detail.
- 2. What is the need of software engineering?
- 3. Which are the Professional software development and Fundamental types of software development.
- 4. Differentiate between software engineering and System Engineering.
- ii) Differentiate between software engineering and Computer Science.
- 5. Which are the Fundamental activities of Software Process and general issues that affect type of software?
- 6. Explain software engineering Diversity.
- 7. Which are the software engineering Ethics and Practices.
- 8. Explain the case study of Insulin Pump.
- 9. Explain the case study of Patient Monitoring system.
- 10. Explain the case study of Weather Information system.
- 11. Explain with diagram Waterfall Model.
- 12. Explain with diagram Incremental Development.
- 13. Explain with diagram Boehm's Spiral Model.
- 14. Explain Process activities.
- 15. Describe in detail General model of design Process.
- 16. Explain Software Validation.
- 17. Explain Requirement Elicitation and Process.
- 18. Explain Interviewing concept
- 19. Explain Scenarios and use cases of MHCPMS.
- 20. Differentiate functional and non functional requirements.
- 21. What are the various types of nonfunctional Requirements?
- 22. Explain Software Requirements Document.
- 23. Explain Natural Specification and Structured Specification.

- 24. Explain Requirements validation.
- 25. Explain Requirements Management.

#### **MODULE 2**

- 26. Explain the context Model of MHCPMS.
- 27. Explain the types of Interaction Modeling. Explain the concept of Use case modeling of Medical Receptionist.
- 28. Describe sequence diagram of View patient Info and diagrammatically represent it.
- 29. Explain with diagram sequence diagram for transfer data. 30. Explain the concept of class diagrams.
- 31. Explain the concept of data driven modeling.
- 32.Explain Event driven modeling with state diagram of Microwave oven.33.Explain System context and Interactions.
- 34. Draw Weather station uses cases with the use case description.
- 35. Explain Architectural Design.
- 36. Explain the sequence diagram of weather information system with appropriate sequencediagram.
- 37. Explain the state diagram of weather information system with appropriate state diagram. 38.Draw Dataflow diagram for ATM Withdrawal. Differentiate DFD With flowchart. 39.Explain and diagrammatically represent Use case Diagram of Library Management System.
- 40. Explain and diagrammatically represent Use case Diagram of Hospital Management System.

#### **MODULE 3**

- 41. Describe Input Output model of Program testing
- 42. Explain three stages of testing.
- 43.Explain Unit testing in detail
- 44. Describe three types of interface errors
- 45.Explain System testing
- 46.Explain 4 types of software Maintenance

- 47. Describe Test Automation and Software Evolution.
- 48.Explain Legacy system management and types of 4 clusters of legacy system management

#### **MODULE 4**

- 49. Explain Project Planning Process.
- 50. Describe project scheduling Process and Schedule Representation.
- 51. Explain Algorithmic cost Modeling.
- 52.Explain COCOMO II Model
- 53. Which are the three concerns of Quality Management.
- 54. What is Product Standard and Process Standard.
- 55.Explain 3 phases of Review Process.
- 56. Write a note on Software Measurement.
- 57. Which are the key stages in this component measurement

#### **MODULE 5**

- 58.Explain 2 ways of coping with change and changing systemrequirements.
- 59. Explain process of Prototype development
- 60.Describe Plan driven and agile Development
- 61. Explain the concept of Extreme Programming
- 62. Explain Testing in XP.
- 63. Describe Agile project management with their advantages.
- 64. What is Meant by Scaling Up and Scaling Out Perscpective