SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

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QUESTION BANK (DESCRIPTIVE)

Subject with Code : SE(9F00304)   **Course & Branch**: MCA

Year & Sem: II-MCA & II-Sem   **Regulation:** R13

UNIT –I

1. a) Describe the nature of Software.   [5M]

   b) Explain the unique nature of WebApps.   [5M]

2. a) Describe the Layered Technology.   [5M]

   b) What is the Frame work of Software engineering? [5M]

3. a) Explain the levels in CMMI Model.   [5M]

   b) Explain the Essence & Principles of Software Engineering. [5M]

4. a) Describe Software Myths in detail.   [5M]

   b) Explain Software Engineering Practice Procedure. [5M]

5. a) What is Process Patterns and explain them?   [5M]

   b) Explain Process Assessment.   [5M]

6. a) Explain the Generic Process Model.   [6M]

   b) Describe the process improvement.   [4M]

7. a) What are Software and its process procedure explain it clearly? [3M]

   b) What is Software Engineering?   [4M]

   c) Demonstrate all the applications of Software Engineering? [3M]

8. a) What is CMMI and its advantages?   [6M]

   b) What are the customer myths and describe them? [4M]

9. a) Explain the Managerial myths with suitable examples. [5M]

   b) Draw CMMI Architecture and explain it briefly? [5M]

10. a) How many layers are implemented in Software Engineering.   [4M]

    b) Explain the importance of generic process model.   [3M]

    c) Explain Legacy Software.   [3M]

UNIT-II

1. a) Describe the Process Model.   [5M]

    b) Explain Water fall model in detail.   [5M]

2. a) What is Prescriptive Process Model and explain it clearly?   [5M]

    b) Explain V And RAID Models.   [5M]

3. a) Describe Incremental Process model.   [4M]

    b) Explain spiral model with suitable example.   [6M]

4. a) Explain Evolutionary process model.   [6M]

    b) Describe the importance of process models.   [4M]

5. a) What is Agile development and explain them?   [5M]

    b) Explain Unified Process Model.   [5M]

6. a) Describe the aspect oriented software development.   [6M]

    b) Explain Agile process with suitable example.   [4M]

7. a) What is Extreme programming?   [5M]

    b) Explain the importance of evolutionary process models.   [5M]

8. a) What is water fall model and describe its importance on software engineering?   [6M]

    b) Explain the importance of models in software engineering?   [4M]

9. a) Explain software components and its uses.   [6M]

    b) Lists the phases in unified process model?   [4M]

10. a) Lists the types of process model.   [4M]

    b) Explain the importance of agile development in organization.   [6M]

UNIT-III

1. a) Explain functional and non functional requirements. [7M]

   b) Describe the importance of requirement modeling. [3M]

2. a) Explain requirements engineering activities. [4M]

   b) Describe the importance of SRS? [6M]

3. a) What is the structured view of software engineering. [5M]

   b) Explain data modeling. [5M]

4. a) Explain data flow diagram with suitable examples. [6M]

   b) Describe the behavioral modeling and its importance. [4M]

5. a) Explain object models and its principles? [5M]

   b) What is the importance of software requirements in project development? [5M]

6. a) Explain ER diagrams in software engineering. [5M]

   b) What is eliciting requirements in software engineering? [5M]

7. a) List of non functional requirements? [3M]

   b) What is the procedure for SRS document process? [4M]

   c) Explain the kinds of system requirements? [3M]

8. a) Explain the structured and behavioral modeling? [5M]

   b) List the steps of project estimation? [5M]

9. a) Explain empirical estimation models. [4M]

   b) Describe the software project estimation? [6M]

10. a) Describe the importance of estimation models. [3M]

    b) Explain the principles of requirement modeling. [3M]

    c) Explain data dictionary and data flow models. [4M]

UNIT-IV

1. a) Explain why design is important in design engineering. [6M]

   b) Discuss analysis and design model. [4M]

2. a) Describe quality attributes and its guidelines. [5M]

   b) List the designing concepts with suitable examples? [5M]

3. a) Explain software design quality guidelines. [5M]

   b) Explain software design quality attributes. [5M]

4. a) Explain software architecture and its importance. [6M]

   b) Discuss architectural styles. [4M]

5. a) What are the steps include in data design ? [5M]

   b) Explain architectural design with example. [5M]

6. a) What is the traditional view of software engineering? [6M]

   b) Explain architectural mapping using dataflow. [4M]

7. a) Explain call and return architecture? [5M]

   b) Describe interface design? [5M]

8. a) Explain function based component design. [4M]

   b) Explain object oriented architecture? [6M]

9. a) Describe the class hierarchies. [5M]

   b) How the message design works? [5M]

10. a) Explain class based component design. [4M]

   b) Write short note on component design principles. [3M]

   c) Compare function oriented & object oriented design. [3M]

UNIT-V

1. a) List out the golden rules for interface design? [5M]

   b) Explain all the design issues. [5M]

2. a) Write a short notes on interface design steps? [4M]

   b) Explain the process in user interface design? [6M]

3. a) How can analysis and principles of interface design? [6M]

   b) Explain pattern based design. [4M]

4. a) Describe pattern based software design. [5M]

   b) Explain architectural patterns. [5M]

5. a) Explain component level design patterns? [5M]

   b) Explain the importance of user interface design patterns. [5M]

6. a) Explain the interface design patterns. [4M]

   b) Describe the principles of component level design patterns. [6M]

7. a) Discuss about architectural patterns with suitable examples? [3M]

   b) Explain the importance of pattern based design? [3M]

   c) Demonstrate all the applications of Software Engineering? [4M]

8. a) Briefly explain golden rules? [5M]

   b) What are the importance of interface analysis and design? [5M]

9. a) Explain the advantages of design patterns. [5M]

   b) Explain software design strategies and complexity? [5M]

10. a) Describe software project management. [4M]

    b) What is pattern based software design and its importance? [6M]

UNIT-VI

1. a) Briefly describe software testing strategies? [5M]

   b) Explain conventional software. [5M]

2. a) Explain unit testing with examples? [5M]

   b) Describe object oriented software? [5M]

3. a) Explain integration testing with examples. [6M]

   b) What is validation testing? [4M]

4. a) Explain the importance and principles of testing. [6M]

   b) Compare unit testing and integration testing. [4M]

5. a) What is system testing and explain it clearly? [5M]

b) Explain the importance of debugging. [5M]

6. a) Explain the art of debugging. [5M]

b) List out strategic approaches. [5M]

7. a) Explain debugging principles with suitable examples? [6M]

b) Describe the importance of debugging? [4M]

8. a) Briefly explain software validation and verification? [6M]

b) How many types of testing approach and explain it clearly? [4M]

9. a) Explain the advantages of testing documentation. [5M]

b) Compare validation testing and system testing? [5M]

10. a) Differentiate integration testing and unit testing? [4M]

b) Explain the importance of conventional and object oriented software. [6M]

UNIT-VII

1. a) What are the testing conventional applications? [5M]

b) Explain the importance of testing. [5M]

2. a) Describe software testing fundamentals? [4M]

b) Describe white box testing and its importance? [6M]

3. a) Briefly explain basis path testing? [5M]

b) Explain conditional testing. [5M]

4. a) What is predicate testing and its importance? [5M]

b) Explain Data flow testing with examples. [5M]

5. a) Explain loop testing and its advantages. [4M]

b) Explain the importance of Black box testing. [6M]

6. a) Explain the equivalence partitioning. [6M]

b) Describe the boundary value analysis. [4M]

7. a) Discuss about graph based testing methods?   [3M]

    b) Explain the testing object oriented applications?   [7M]

8. a) Briefly explain object oriented testing methods?   [5M]

    b) What are the testing methods applicable at class level?   [5M]

9. a) Explain inter class test case design.   [3M]

    b) Compare block box testing and white box testing?   [7M]

10. a) Explain the importance of testing conventional applications.   [5M]

    b) Briefly describe testing procedures and its importance?   [5M]

UNIT-VIII

1. a) List out the umbrella activities?   [5M]

   b) Explain software quality assurance.   [5M]

2. a) Write a short notes on software configuration management?   [5M]

   b) Explain the process measurement and metrics?   [5M]

3. a) How can analysis the size oriented metrics?   [6M]

    b) Explain function oriented metrics.   [4M]

4. a) Describe the metrics for software quality?   [5M]

   b) Explain product metrics and its importance.   [5M]

5. a) Explain metrics for requirements model?   [5M]

    b) Explain the metrics for the design model.   [5M]

6. a) Explain the metrics for source code.   [5M]

    b) Describe the metrics for testing.   [5M]

7. a) Discuss about the maintenance for metrics?   [4M]

    b) Explain the importance of software reengineering?   [6M]

8. a) Briefly explain a software reengineering process model?   [6M]

   b) What are the software reengineering activities?   [4M]

9. a) Describe the importance of software quality assurance.   [5M]

    b) Briefly describe the umbrella activities?   [5M]

10. a) Explain the importance of software configuration management.   [6M]

    b) List out the importance of measurements and metrics?   [4M]

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