SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR
Siddharth Nagar, Narayanavanam Road – 517583
QUESTION BANK (DESCRIPTIVE)

Subject with Code : Object Oriented Software Engineering (16CS5801)

Course & Branch: M.Tech. & CSE

Year & Sem: I M.Tech I-Sem   **Regulation:R16**

UNIT-I
INTRODUCTION

1. Explain about Software Engineering Paradigm in detail [10 M]

2. a) Explain the Process in Software Engineering [6 M]

   b) Discuss about the issues/problems in OOSE [4 M]

3. Write in details about any 2 software process model [10 M]

4. a) Compare Evolutionary Model and Iterative Model [5 M]

   b) What are Process and Project? Differentiate with example. [5 M]

5. a) Explain about the classical life cycle model [5 M]

   b) Compare Spiral Model and RAD Model [5M]

6. Write in detail about Project Management. [10 M]

7. Compare all the SDLC models with one another with its pros and cons. [10 M]

8. a) What are the metrics of Project? Explain it with example [5 M]

   b) What are the metrics of Process? Explain it with example [5 M]

9. List the principles of OOSE with its concepts [10 M]

10. a) Discuss how OOSE differs from SE [4 M]

    b) List out the 14 points in FP with its formula and discuss about it in detail [6 M]

UNIT-II
PLANNING & SCHEDULING

1. a) Explain about Throw-away Software Prototyping   [5 M]

    b) Explain about Evolutionary Software Prototyping   [5 M]

2. Explain the methodologies in Object Oriented Estimation   [10 M]

3. a) What are the techniques in Rapid Prototyping? Explain them in detail [5 M]

    b) Sketch the process of Incremental development process   [5 M]

4. Write in detail about Object Oriented approach for Scheduling   [10 M]

5. a) What are the activities associated with project planning. Explain   [5 M]

    b) Differentiate Problem-based estimation and Process-based estimation   [5 M]

6. Explain in detail about Estimation for Software Projects   [10 M]

7. a) Process-Based Estimation Vs Tool-Based Estimation. Explain.   [5 M]

    b) List out the Scope and Resources on Software Estimation   [5 M]

8. Write about COCOMO-II Model in brief.   [10 M]

9. List and explain the steps in Risk Management Process   [10 M]

10. a) What are the Eight Reasons for Late Software Delivery? Discuss   [5 M]

    b) List out the principles of Project Scheduling and discuss about it in brief   [5 M]

UNIT-III
UNIT III - ANALYSIS & DESIGN

1. Explain in detail about Design Patterns.   [10 M]

2. a) Explain in detail about Scenario-based Modeling   [5 M]

    b) Explain in detail about Class-based Modeling   [5 M]

3. Explain in detail about Object Design Process   [10 M]

4. a) Brief about Structured Analysis vs Object Oriented Analysis   [5 M]

    b) Explain the techniques in Domain Analysis   [5 M]

5. Explain in detail about Flow-oriented Modeling and Behavioral Modeling [10 M]

6. a) Explain the steps in effective Modular Design [5 M]

   b) Explain about Design concepts for Modular Design [5 M]

7. Write in detail about Object Model and its relationship [10 M]

8. a) Explain the phases in Structured Analysis [5 M]

   b) List and brief about the major steps in determining requirements for new system [5 M]

9. Explain in detail about Design Concepts & Principles [10 M]

10. a) List out the Goals and elements of Analysis Modeling? Brief about them [6 M]

    b) Sketch an example to explain state diagram. [4 M]

UNIT-IV
IMPLEMENTATION & TESTING

1. a) Explain brief about Structured Programming [5 M]

   b) Explain brief about Functional Programming [5 M]

2. Write in brief about Black box testing techniques [10 M]

3. Write in brief about White box testing techniques [10 M]

4. a) List and brief about levels of Testing in detail [6 M]

   b) Discuss about the Challenges in Software Implementation [4 M]

5. Explain about Object oriented testing strategies in details [10 M]

6. a) Explain about Top-Down Implementation and Testing with diagram [5 M]

   b) Explain about Bottom-Up Implementation and Testing with diagram [5 M]

7. Explain about object oriented product Implementation & Integration [10 M]

8. a) How OOP helps in Implementation and Testing process [5 M]

   b) How OOA and OOD models helps while Testing a software [5 M]

9. a) Explain about Cyclomatic Complexity with an example [5 M]

   b) Differentiate Control flow testing and Data flow testing. [5M]

10. a) Differentiate Verification and Validation with v-shaped model [6 M]

    b) Define Regression Testing and how it differ from Retesting [4 M]

UNIT - V
MAINTENANCE

1. Explain in detail about Maintenance Testing with its Pros and Cons [10 M]

2. Write the process related to Maintenance Testing [10 M]

3. a) How Preventive maintenance differ from adaptive maintenance. Explain [5 M]

   b) How perfective maintenance differ from Corrective maintenance. Explain [5 M]

4. What are the types of Maintenance Testing? Explain [10 M]

5. a) What is SRS and how it is made. Brief with the template [5 M]

   b) What are the factors that affect Maintenance Cost [5 M]

6. Explain the Activities in Maintenance [10 M]

7. Explain the laws in Program evolution dynamics [10 M]

8. a) Software Maintainability Metrics Help Identify Problem Areas. Justify [5 M]

   b) What is System Documentation and list out the contents in it [5 M]

9. Explain 'Lehman's laws' in detail [10 M]

10. Write A Case Study Project for Software Engineering Education [10 M]

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