

Kongu Engineering College

Perundurai – 638060

22CSC51 – Agile Methodologies

Question Bank

Unit 4

Part A

1. Recall Software Testing
2. Differentiate between verification and validation
3. State Unit testing
4. Indicate the use of stub and drivers in unit testing
5. List the types of integration testing
6. Enlist the benefits of smoke testing
7. Compare alpha testing and beta testing
8. Indicate the types of system testing
9. Define debugging
10. What are the outcomes of debugging?
11. Identify the types of debugging strategies
12. Define flow graph
13. Draw the flow graphs to represent the control structures
14. What is cyclomatic complexity and how will you calculate it?
15. Distinguish between white box and black box testing

Part B

1. Explain in detail about the methodologies for testing a conventional software (Unit testing and integration testing)
2. Discuss in detail about the methodologies for testing an object oriented software (Validation testing and system testing)
3. Outline the concepts of basis path testing in white box testing
4. Describe the methods of conducting the black box testing
5. Brief about the debugging process

Unit 5

Part A

1. Indicate the 4 Ps of Management Spectrum
2. List the types of people in project management
3. Compare process and project metrics
4. Differentiate the direct measures and indirect measures
5. State the metrics for software quality
6. Define Defect Removal Efficiency

7. How software scope can be defined?
8. Identify the four dimensions of feasibility
9. List the categories of resources
10. Infer the advantages and disadvantages of LOC based estimation
11. Infer the advantages and disadvantages of FP based estimation
12. Estimate the effort required for the software development for ATM which has 2 screens, 8 reports and 15 software components. Assume average complexity and average developer maturity.
13. Define SPI
14. What are the steps in SPI Process
15. Recall the objectives of CMMI
16. Give the representations of CMMI
17. List the maturity levels of CMMI
18. Indicate the capability levels of CMMI
19. Give the advantages and disadvantages of CMMI

Part B

1. Problems on LOC based Estimation refer scanned notes
2. Problems on FP based Estimation refer scanned notes
3. Problems on Earned Value Analysis refer scanned notes
4. Describe in detail about the CMMI levels
5. Outline the different kinds of software metrics
6. Summarize the COCOMO II model in detail