

H 1194

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2006.

Sixth Semester

Computer Science and Engineering

CS 338 — SOFTWARE ENGINEERING

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. How a software process can be characterized?
2. List out the problems encountered in Linear Sequential model.
3. State the different criteria's applied to evaluate an effective modular system.
4. In what way, an Abstraction differs from a Refinement?
5. How scope of the software can be determined?
6. What are the project indicators? How do they help a project?
7. What is behavioral testing?
8. How cyclomatic complexity of a program can be computed?
9. What do you mean by 'Version control'?
10. Define the term baseline in SCM.

PART B — (5 × 16 = 80 marks)

11. (i) Which type of applications would suit RAD model? Justify your answer. (10)
- (ii) Describe the steps involved in Risk Management. (6)
12. (a) (i) Explain the different types of coupling. (8)
- (ii) How do the design aspects vary for reuse of the software developed? (8)

Or

- (b) (i) Summarize the steps involved in data design process. (12)
- (ii) Give five examples for computer based real time systems. (4)

13. (a) (i) Discuss the role of SQA group. How do you prepare a SQA plan for a project? (1)
- (ii) How reliability can be ensured for a project? (6)

Or

- (b) (i) What are the measures involved in software metrics? (6)
- (ii) Describe the direct measures in detail. (10)
14. (a) Briefly discuss the various software testing strategies. (16)

Or

- (b) (i) Develop a set of test cases that would test the following program. A program reads three integer values to represent the length of the sides of the rectangle. It prints the message whether the triangle is Scalene, Isosceles or Equilateral. (6)
- (ii) What are the various types of Software Maintenance schemes? Discuss the issues to be considered while maintaining softwares. (10)
15. (a) Explain the various features of CASE repository in detail. (16)

Or

- (b) (i) Write about the Software Configuration items that form the baseline of the project. (10)
- (ii) Configuration Status Reporting plays a vital role in the success of large development projects. Comment on this. (6)
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