Total No. of Questions: 10 ] [ Total No. of Printed Pages: 3 Roll No. CS-603(N) B. E. (Sixth Semester) EXAMINATION, June, 2011 (Computer Science & Engg. Branch) SOFTWARE ENGINEERING AND PROJECT MANAGEMENT [CS-603(N)] Time: Three Hours Maximum Marks: 100 Minimum Pass Marks: 35 Note: Attempt all questions. All questions carry equal marks. 1. (a) Explain the various phases of RAD model. Discuss the situation where RAD model is useful. (b) Explain software process. Enumerate the activities common to all software processes. Also list the characteristics of software processes. 10 Or 2. (a) Explain the working of spiral model. Why spiral model is considered to be meta model? 10 (b). What is CMM? Discuss its various levels. 10 3. (a) Explain use case approach for specifying functional specifications. (b) Differentiate between function oriented and object

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oriented modeling.

Or

- 4. (a) Define the terms analysis and modeling. State the objectives of analysis and modeling.
  - (b) What is the use of requirement engineering? What are the problems in formulation of requirements? 10
- 5. (a) Differentiate between structured analysis and structured design in the context of function oriented
  - (b) Explain the term modularity. What is cohesion and coupling? Explain with examples.

- 6. (a) Explain the use of UML for object oriented design. 10
  - (b) What are the fundamental principles of user interface design ? Explain. Also enumerate the end user requirements in user interface design.
- 7. (a) What is system testing? What series of tests are 10 performed during system testing?
  - 10 (b) Explain the following:
    - Test Oracles (i)
    - (ii) Formal Technical Review (FTR)
    - (iii) Code Inspection

- 8. (a) Differentiate between black box and white box testing techniques.
  - (b) Calculate the cyclomatic complexity for the following program. Explain your approach:

if (a > b) temp = aelse temp = b

if (c > temp)

temp = c

return temp

9.	(a)	Discuss	various	cost	estimation	models	and also
		compare	them.				10

(b) What do you mean by the term software reverse engineering? Why is it required? Explain the different activities undertaken during reverse engineering.

Or

- 10. (a) What are the different types of maintenance that a software product might need? Why are these maintenance required?
  - (b) What are risk management activities? Explain what is the effect of risk management activity on the overall cost of project?

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