

Reg. No. :

--	--	--	--	--	--	--	--	--	--

C 3211

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2008.

Sixth Semester

(Regulation 2004)

Computer Science and Engineering

CS 1353 — SOFTWARE ENGINEERING

(Common to B.E. (Part -- Time) – Fifth Semester -- Regulation 2005)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What does a system engineering model accomplish?
2. Differentiate between Verification and Validation?
3. How do we use the models that we create during requirement analysis?
4. What steps are required to build ERD?
5. How can we evaluate a design method to determine if it will lead to efficient modularity?
6. What is SCM?
7. What is graph matrix? How do we extend it for use in testing?
8. What is a critical module and why should we identify it?
9. List out the different approaches to size the software?
10. What are the advantages of CASE tool?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the Water fall Model. What are the problems that are sometimes encountered when the Waterfall model is applied? (8)
- (ii) Explain the process model that couples the iterative nature of prototyping with the controlled & systematic aspects of the Waterfall model. (8)

Or

- (b) (i) Explain the system engineering hierarchy. (8)
- (ii) Explain the incremental model. What are the advantages and disadvantages? (8)

12. (a) (i) Explain the prototyping model. How do we select appropriate prototyping approach? (8)
- (ii) Explain Rapid Prototyping techniques. (8)

Or

- (b) Develop Context-level DFD, Level-1 DFD, Level-2 DFD for a library Management system. (16)

13. (a) Explain the design steps of Transform mapping and Transaction mapping. (16)

Or

- (b) (i) Explain real time system. What are the design considerations for real time system? (8)
- (ii) Explain the interface design activities. What steps do we perform to accomplish interface design? (8)

14. (a) (i) How is cyclomatic complexity computed? Calculate cyclomatic complexity for the program to find the greatest of three numbers. (8)
- (ii) Explain how basis path testing method can be applied to derive the basis set. (8)

Or

- (b) Explain the Integration Testing. What are the steps for Top-down integration and Bottom-up integration? Compare and contrast Top-down and Bottom-up integration Testing? (16)

15. (a) (i) Explain COCOMO Model. (8)
(ii) What is an Activity Network? Explain. (8)

Or

- (b) (i) Explain the scheduling of a software Project. How are PERT and CPM useful in Project Scheduling? (8)
(ii) Explain Earned Value Analysis. Explain the steps to determine Earned Value. (8)
-