# G 7055

M.E. DEGREE EXAMINATION, JANUARY 2006.

First Semester

Computer Science and Engineering

CS 1604 — SOFTWARE ENGINEERING METHODOLOGIES

(Regulation 2005)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the disadvantages of RAD model?

2. List out the factors which affect the software pricing.

3. Who is called stakeholders? How to identify them?

4. What is the purpose of domain analysis? How is it related to the concept of requirements patterns?

5. Differentiate between the terms : Refinement and Refactoring in the design engineering.

6. Define the terms : Stamp coupling and Common coupling.

7. Why is a highly coupled module difficult for unit test?

8. What are the guidelines for equivalence partitioning?

9. Write down the objectives of formal technical review.

10. What are all the functions of change control authority?

PART B — (5 × 16 = 80 marks)

11. (i) Explain in detail all the review guidelines involved in FTR. (8)

(ii) What is meant by software reliability? Explain how to measure reliability and availability. (8)

12. (a) (i) Describe the process model which is more suitable for large sc systems. (1

(ii) What are all the disadvantages of formal methods model? (

Or

(b) (i) Explain with example how to track the project schedule. (1

(ii) What is RMMM plan? Explain briefly. (6

13. (a) (i) Develop a use case scenario for withdrawal at an ATM. (7

(ii) Draw a context-level diagram for a simple invoicing system. Writ a context level processing narrative for the system. (9)

Or

(b) How do you create a behavioral model? Explain with example.

14. (a) (i) Describe transform flow and transaction flow. (8)

(ii) Draw level-0 DFD and level-1 DFD for safe home security function. (8)

Or

(b) Explain in detail the golden rules for interface design.

15. (a) (i) Explain unit testing and control structure testing. (8)

(ii) What are the merits of object oriented testing? (8)

Or

(b) (i) Find out the cyclomatic complexity for greatest of three numbers using flow graph notation. (10)

(ii) What is meant by boundary value analysis in black box testing? Explain briefly. (6)

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