Reg. No. : | | | | | | | | | | | |

A 1189

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

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. List the four fundamental process activities.
2. Justify the need for feasibility study.
3. Define Modularity.
4. What is Reusability?
5. Define the term reliability.
6. What are Software Metrics?
7. What is a Software Test Plan? Discuss.
8. List the different types of software maintenance.
9. What is changeability?
10. Why Version Control? Discuss.

PART B — (5 × 16 = 80 marks)

11. (a) "The details of the project plan vary depending on the type of project and organization". List the details that will be contained in almost all plans. (16)

Or

(b) (i) With a neat sketch discuss the waterfall life cycle model for software development. (8)

(ii) What are the major drawbacks of the Water Fall Model? Does the Spiral Model overcome the drawbacks of Water Fall model? Discuss. (8)

12. (a) With relevant examples discuss the following levels of cohesion :

(i) Coincidental cohesion. (4)

(ii) Logical cohesion. (4)

(iii) Temporal cohesion. (4)

(iv) Procedural cohesion. (4)

Or

(b) With a relevant example discuss the following levels of coupling :

(i) Content coupling. (4)

(ii) Control coupling. (4)

(iii) Stamp coupling. (4)

(iv) Data coupling. (4)

13. (a) Present a tutorial on Software Quality Assurance. (16)

Or

(b) Classify Metrics and discuss the same with examples. (16)

14. (a) List and discuss the different verification and validation activities that have to be carried out during each phase of the software development life cycle. (16)

Or

(b) List and discuss the various testing techniques. Give examples. (16)

15. (a) (i) What is Software Configuration Management? Justify the need for Software Configuration Management. (8)

(ii) List and discuss the various Software Configuration Items. (8)

Or

(b) List and discuss the various Computer Aided Software Engineering tools. (16)
