Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 41145

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Fifth Semester

Computer Science and Engineering

080230019 — SOFTWARE ENGINEERING

(Regulation 2008)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define software engineering.

2. What are the salient features of a real time system?

3. What is a software process as opposed to software project?

4. Mention any tools for process modeling.

5. What is a use case?

6. How is documentation helpful for the design process?

7. Give any four examples for programming paradigms.

8. What are the issues that arise in testing activities?

9. What is the difference between automated testing with manual testing?

10. Define the term reverse engineering.

PART B — (5 × 16 = 80 marks)

11. (a) List the process models of software product development. Explain in detail about the spiral models with neat diagrams.   (16)

Or

(b) Illustrate, with suitable examples, as to how the field of Software Engineering changed over a period of time?   (16)

12. (a) What are activities involved in Risk management? Discuss them in detail. (16)

Or

(b) (i) What are the types of requirements? Explain them. (8)

(ii) Explain in detail about the COCOMO model for effort estimation. (8)

13. (a) Draw the use case diagram for the Library management system. (16)

Or

(b) (i) Define: Cohesion, coupling. Discuss about the different types of Cohesion and coupling. (8)

(ii) Explain any one technique for improving the design. (8)

14. (a) Discuss about various types of Integration testing. (16)

Or

(b) (i) Write short notes on the features of automated testing tools. (8)

(ii) List the various programming guidelines. (8)

15. (a) Write short notes on:
   (i) Reliability. (8)
   (ii) Function Testing. (8)

Or

(b) Write short notes on:
   (i) Maintenance problems (8)
   (ii) Software rejuvenation. (8)

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