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Question Paper Code : 53104

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2010

Fifth Semester

Computer Science and Engineering

CS 2301 — SOFTWARE ENGINEERING

(Regulation 2008)

Time : Three hours

Maximum : 100 Marks

Answer ALL questions

PART A — (10 × 2 = 20 Marks)

1. Define Business Process Reengineering.
2. Write down the generic process framework that is applicable to any software project.
3. What is Software Prototyping?
4. Define functional and non-Functional requirements.
5. What are the primary interaction styles and state their advantages?
6. List the architectural models that can be developed.
7. What are the characteristics of good tester?
8. Give the difference between verification and validation.
9. What are the processes of risk management?
10. Define error, fault and failure.

PART B — (5 × 16 = 80 Marks)

11. (a) Explain the following: (i) waterfall model (ii) Spiral model (iii) RAD model (iv) Prototyping model. (4 + 4 + 4 + 4)

Or

- (b) Discuss in detail the project structure and programming team structure of a software organization. (16)

12. (a) Discuss any four process models with suitable application. (4 + 4 + 4 + 4)

Or

- (b) Explain the execution of seven distinct functions accomplished in requirement engineering process. (16)

13. (a) Explain the core activities involved in User Interface design process with necessary block diagrams. (8 + 8)

Or

- (b) Explain the various modular decomposition and control styles commonly used in any organizational model. (16)

14. (a) (i) What is white-box testing? (2)
(ii) Explain how basis path testing helps to derive test cases to test every statement of a program. (14)

Or

- (b) (i) Define : Regression testing. (2)
(ii) Distinguish: top-down and bottom-up integration. (10)
(iii) How is testing different from debugging? Justify. (4)

15. (a) (i) Elaborate on the series of tasks of a software configuration management process. (8)
(ii) Describe function point analysis with a neat example. (8)

Or

- (b) (i) Explain the methods of decomposition for software cost estimation. (8)
(ii) Mention the challenges of risk management. (8)