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Question Paper Code : 71748

M.E./M.Tech. DEGREE EXAMINATION, JUNE/JULY 2013.

First Semester

Software Engineering

SE 9213/SE 912 — OBJECT ORIENTED SOFTWARE ENGINEERING

(Common to M.E. Computer Science and Engineering)

(Regulation 2009)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is the purpose of modeling?

2. What is the difference between a scenario and a use case? When do you use such construct?

3. List out the heuristics for identifying initial analysis objects.

4. How do you identify relationships among actors and use cases?

5. Mention the activities of a system design.

6. Create an outline for system design document.

7. How do you apply a model transformation?

8. List and define the techniques available for increasing the software system reliability.

9. Mention the tools available for configuration management.

10. Discuss the levels in characterizing the maturity of software life cycle models.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Draw the sequence diagram for the activities in a banking system. (8)

(ii) Explain the activities of a developer when joining a project organization and its communication infrastructure. (8)

Or

(b) (i) Narrate the development activities related to software engineering. (8)

(ii) Draw the state chart diagram for 2B watch set time function related to its internal transitions for set time state. (8)

12. (a) (i) Briefly explain the non functional requirements of elicitation in detail. (8)

(ii) With a flowchart, explain the activities of joint application design. (8)

Or

(b) (i) Discuss the concepts of realism, verifiability and traceability with an example. (8)

(ii) With a sample figure, define analysis model and compare object model with dynamic model. (8)

13. (a) (i) Describe the concept of coupling and cohesion with an example. (8)

(ii) Discuss the style of 3 tier and 4 tier architecture with a neat UML class diagram. (8)

Or

(b) (i) With an example, Summarize the overall activities of a system design. (8)

(ii) For an example 'MyTrip' subsystem, explain how do you map subsystems to processors and components. (8)

14. (a) Design the activities of an object design using an UML activity diagram. (16)

Or

(b) Briefly explain the concepts of interface specification with an example. (16)

15. (a) Summarize the overview of rationale activities from issues to decisions in detail. (16)

Or

(b) Explain the tasks and activities for realization of the DB subsystem with a neat table. (16)

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