E 279

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2003.

Fifth Semester

Information Technology

IF 354 — OBJECT ORIENTED ANALYSIS AND DESIGN

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — ($10 \times 2 = 20$ marks)

1. What is UML? Explain why UML is required.

2. What is a scenario? How scenario is related to a use case?

3. What is an Asynchronous message? How an Asynchronous message is represented in Sequence Diagram?

4. What do you mean by a reference object and a value object?

5. What are the uses of State diagram?

6. Explain the use of fork in Activity Diagram with an example.

7. How a node and a physical module inside the node are represented in Deployment diagram?

8. What do you mean by strongly typed and untyped programming language?

9. What is an abstract Class? Give an example.

10. What is meant by an active object and a passive object?

PART B — ($5 \times 16 = 80$ marks)

11. Do you think software is inherently complex? Why? Justify your answer.

12. (a) What are the risks in a Project? Briefly explain major categories of risks.

Or

(b) What is a Class Diagram? With an example class diagram explain Associations, Multiplicity, Generalization.

13. (a) Compare and contrast between Sequence and Collaboration diagram with help of example diagrams.

Or

(b) Explain the concept of Aggregation, Composition, Multiple and dynamic classification with examples.

14. (a) Explain Macro and Micro development processes as described by Grady Booch.

Or

(b) What are the Metrics to check whether the given class or object is well designed?

15. (a) With example explain Static and Dynamic behavior of an object oriented system. How the static and dynamic behaviors are identified and documented?

Or

(b) Write short notes on :

(i) Modularity

(ii) Abstraction

(iii) Object Oriented Software Engineering

(iv) CRC cards.
