R 8214

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2006.

Seventh Semester

Computer Science and Engineering

CS 433 — OBJECT ORIENTED SYSTEM ANALYSIS AND DESIGN

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Justify the reasons for object orientation.

2. What are the relationships between objects and messages?

3. Define object persistence.

4. What is a prototype? List out the commonly accepted categories of prototypes.

5. List out the symbols associated with OMT data flow diagram.

6. Differentiate patterns and antipatterns.

7. Define aggregation with an example.

8. Explain the mapping between table and class.

9. Describe reverse and forward engineering.

10. What basic activities are performed in using debugging tools?

11. (a) (i) Describe the components of the unified approach. (10)

    (ii) Identify the attributes and methods of a mobile phone environment. (6)

Or

    (b) (i) Compare procedural approach with object oriented approach with a suitable example for order processing system. (10)

    (ii) Explain the life cycle of OOSD. (6)

12. (a) (i) Explain the diagrams associated with Booch methodology. (8)

    (ii) Highlight the features of Jacobson methodologies. (8)

Or

    (b) (i) Briefly describe the Booch system development processes. (8)

    (ii) What is UML? What is the importance of UML? (4)

    (iii) What is a qualifier? Explain its role in a class diagram. (4)

13. (a) (i) Explain the steps involved in the process of use-case driven object oriented analysis. (8)

    (ii) Why are uses and extends associations useful in use-case modeling? Explain with an example. (8)

Or

    (b) (i) What is a noun phrase approach? Explain its usage for an on-line book-store application. (10)

    (ii) Why is identifying classes an incremental process? (6)

14. (a) (i) Explain the object-oriented design process in the unified approach. (8)

    (ii) List the object oriented design axioms and corollaries. (8)

Or

    (b) (i) What are public and private protocols? What is the significance of separating these two protocols? (8)

    (ii) Describe the process of creating the access layer classes. (8)

15. (a) (i) Describe the different testing strategies. (10)

(ii) What is usability testing? Justify the need for usability testing. (6)

Or

(b) (i) List out the guidelines for developing a user satisfaction test. (8)

(ii) What is a test plan? What steps are followed in developing a test plan? (8)

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