G 3541

M.C.A. DEGREE EXAMINATION, MAY/JUNE 2007.

Fourth Semester

MC 1753 — OBJECT ORIENTED ANALYSIS AND DESIGN

(Regulation 2005)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   Give the characteristics of an object oriented methodology.

2.   What are the four quality measures for system evaluation?

3.   List out differences between patterns and frameworks.

4.   What is UML? What is the importance of UML?

5.   Distinguish between users and actors.

6.   Why is the CRC approach useful?

7.   What is the relationship between coupling and cohesion?

8.   How can use cases help in designing the view layer objects?

9.   Give the impact of object orientation on testing.

10. Why do we need to measure user satisfaction?

PART B — (5 × 16 = 80 marks)

11. (a)   (i)   List out the advantages of object — oriented system development.
                                                                          (6)

     (ii)   Explain the categories of prototyping and why it is useful?   (6)

     (iii) Compare inheritance and aggregation.   (4)

Or

     (b)   Describe the activities involved in Object Oriented Software Development
           Life Cycle.   (16)

12. (a) Explain the Booch's system development process in detail. (16)

Or,

(b) Identify the use cases, classes and relationships in a Library Information System. Also give the use case diagram and class diagram. (16)

13. (a) With an example explain the use-case driven approach to identify the classes and their behaviors through sequence and collaboration diagram. (16)

Or

(b) Explain how would you identify the object relationships, attributes and the methods of a Library Information System? (16)

14. (a) (i) List out object-oriented design axioms and corollaries and explain. (8)

(ii) Discuss how can you map the objects from relational systems. (8)

Or

(b) (i) Explain the activities involved in the micro-level process for designing the view layer classes. (12)

(ii) Give the ways to provide the user feedback. (4)

15. (a) (i) Give the guidelines for developing quality assurance test cases. (8)

(ii) What are the steps needed to create a test plan? (8)

Or

(b) (i) List out the Myer's debugging principles. (4)

(ii) Give the guidelines for developing usability testing and user satisfaction testing. (12)

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