MCA51

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Fifth Semester M.C.A Degree Examination, January/February 2005

Master of Computer Applications
Object Oriented Analysis & Design

Time: 3 hrs.]   [Max.Marks : 100

Note: *1. Answer any FIVE full questions.*
2. All questions carry equal marks.

1. (a) Compare and contrast the procedure oriented software development with object oriented software development. What are the advantages of object orientation? Explain. **(8 Marks)**

   (b) Explain the following terms with example.

      i)   Consumer-producer association

      ii) Static and dynamic binding

      iii) Object persistence **(6 Marks)**

   (c) What are the quality measures to be considered while building high quality software? **(6 Marks)**

2. (a) What is software development process? Describe the waterfall approach of software development process. **(8 Marks)**

   (b) Why reusability is important? How does object oriented software development promote reusability? Explain. **(6 Marks)**

   (c) What is component based development? Why is it important in object oriented system development? **(6 Marks)**

3. (a) Describe Booch methodology for object oriented system development. **(10 Marks)**

   (b) Discuss the unified approach to software development. **(10 Marks)**

4. (a) What is UML? Explain the behaviour diagrams in UML. **(10 Marks)**

   (b) Describe the UML class diagram. **(5 Marks)**

   (c) What are the guidelines for developing effective documentation? Explain. **(5 Marks)**

5. (a) List the different approaches for identifying classes. Describe the noun phrase approach for identifying classes in problem domain. **(10 Marks)**

   (b) Describe the difference between patterns and frameworks. **(5 Marks)**

   (c) What is the purpose and need of analysis? Why is analysis a difficult task? Explain. **(5 Marks)**

6. (a) What is association? What are the guidelines for identifying association?

(5 Marks)

(b) What is an a-part-of structure? What are its properties? What guidelines would you use to identify a-part-of structure? **(5 Marks)**

(c) What are different activities of object oriented design process? Explain.

(10 Marks)

7. (a) Explain the object oriented design axioms and corollaries. **(10 Marks)**

(b) What is an OODBMS? Compare it with DBMS. **(5 Marks)**

(c) Describe the process of creating the access layer classes. **(5 Marks)**

8. (a) Describe the UI design rules. **(10 Marks)**

(b) Explain the macro and micro processes of view layer design. **(5 Marks)**

(c) Give the guidelines for designing Dialog box, error messages and command buttons. **(5 Marks)**

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