

MCA (Revised)
Term-End Examination
December, 2008

**MCS-032 : OBJECT ORIENTED ANALYSIS
AND DESIGN**

Time : 3 hours

Maximum Marks : 100

Note : Question No. 1 is compulsory. Attempt any three questions from the rest.

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| 1. | (a) | Explain the concept of information hiding.
How it is different from data encapsulation ? | 5 |
| | (b) | Compare and contrast DDBMS and ODBMS. | 5 |
| | (c) | Give brief description of characteristics of object oriented modelling. | 5 |
| | (d) | What are integrity constraints ? Briefly discuss the type of integrity constraints. | 5 |
| | (e) | How do we implement the concept of association in object oriented programming languages ? | 5 |
| | (f) | Compare object oriented analysis for software development with structured analysis. | 5 |

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| | (g) | What is an activity diagram ? Explain how activity diagram focuses on flows driven by internal processing with the help of suitable example. | 5 |
| | (h) | Draw a class and instance diagram for looping statements in C-programming language. | 5 |
| 2. | (a) | Explain how classes can be designed. | 7 |
| | (b) | Explain the various considerations while using dynamic model. Prepare a dynamic model for Airlines Reservation system. | 8 |
| | (c) | What is meant by object interoperability ? Where is it used and why ? | 5 |
| 3. | (a) | With an example explain aggregation. | 5 |
| | (b) | Explain the elements and notations of UML class diagram in detail. | 7 |
| | (c) | Discuss test plans and test cases. | 8 |
| 4. | (a) | Give the guidelines for developing usability test and user satisfaction test. | 8 |
| | (b) | Explain various components used in DFD by using suitable example such as billing system. | 5 |

- (c) With an example explain noun phrase approach for classification. 7

5. Write short notes on :

$5 \times 4 = 20$

- (a) Multiplicity and its types
- (b) State diagram
- (c) Persistence
- (d) OMT models.

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