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MCS-032

MCA (Revised)

Term-End Examination

MCS-032 : OBJECT ORIENTED ANALYSIS AND DESIGN

Time : 3 Hours] *[Maximum : Marks : 100*

Note: Question number 1 is compulsory. Answer any three questions from the rest.

1. (a) What is 'UML'? List the models, unified to contribute UML. 5

   (b) How usecase diagram relates to Dataflow diagram? How usecase diagram, specifies the modular description of any system? Discuss with suitable example 10

   (c) Discuss the role of object model in development of any object oriented system. 5

   (d) How Data Flow Diagram (DFD) is connected to the Entity Relationship Diagram (ERD). Give suitable example in support of your answer. 10

(e) What do you understand by Data Persistence? How you transform a non persistant data to persistent one? 5

(f) Discuss the sequence diagram with suitable example. 5

2. (a) When do we draw a state diagram? Discuss all the notations of state diagram. Draw state diagram for the game of chess. 10

(b) What do you understand by the term "Association" in UML? How Association differs from Link? Briefly discuss the types of associations used in data modeling. 10

3. (a) Explain object modelling and three schema architecture for RDBMS with the help of a diagram. 10

(b) Class diagram is addressed by which model in UML & Object oriented modeling, respectively? How class diagram differs from instance diagram? Give notations for both class diagram and instance diagram. 5

(c) Differentiate between

Object Oriented Analysis

&

Object Oriented Design. 5

4. (a) Briefly discuss the concept of role names in a class diagram. Use this concept of role name, while drawing class diagram for following situation "Many employees works for a company among them, one is a manager". 6

(b) What do you understand by the term "Concurrency" in any transaction system? Explain the issues involved in identification of concurrency in any system. Briefly discuss the concept of Aggregation concurrency in a state diagram. 10

(c) Compare between: 4

Generalization & Specialization

5. Write short note on the following: 4×5=20

(i) Object Interoperability

(ii) Integrity constraints & its type

(iii) Object ID & its advantages

(v) Deployment diagram

—x—