USN | | | | | | | | | | 16/17MCA51

Fifth Semester MCA Degree Examination, Jan./Feb. 2021
Object Oriented Modeling and Design Patterns

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 a. Explain Object Oriented Themes. (06 Marks)
   b. What are the purposes served by the model? (04 Marks)
   c. Differentiate between Links and Associations. (06 Marks)

OR

2 a. Explain Sample class model for Windowing System. (06 Marks)
   b. Differentiate between Association, Aggregation and Composition with appropriate example. (08 Marks)
   c. Define Reification. (02 Marks)

Module-2

3 a. Differentiate between State and Event. (02 Marks)
   b. Explain state diagram for a Telephone System. (06 Marks)
   c. Discuss differentiate types of concurrency. (08 Marks)

OR

4 a. Explain components of Activity model. (08 Marks)
   b. Briefly explain UseCase relationships. (08 Marks)

Module-3

5 a. Elaborate and explain questions to be answered for good system concept. (06 Marks)
   b. How do you eliminate unnecessary and incorrect attributes? (10 Marks)

OR

6 a. Explain the steps in constructing Domain State Model. Describe the steps to be followed in. (08 Marks)
   b. What are the steps in constructing Application Class model? Explain. (08 Marks)

Module-4

7 a. Explain different ways of breaking a system into subsystem. (08 Marks)
   b. Briefly explain Allocation of Subsystems. (08 Marks)

OR

8 a. Briefly explain how you bridge the gap from high level requirement to low level resources. (08 Marks)
   b. Briefly explain steps in Designing algorithms. (08 Marks)

Module-5

9 a. Discuss the properties of pattern. (08 Marks)
   b. What is MVC pattern? Explain liabilities of MVC. (08 Marks)

OR

10 a. Explain steps in implementing Whole-part pattern. (08 Marks)
   b. Explain the Structure and Dynamics of Client Dispatcher server pattern. (08 Marks)

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