USN | | | | | | | | | | **15CS551**

Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018
Object Oriented Modeling and Design

Time: 3 hrs.   Max. Marks: 80

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

Module-1

1   a. What is object-oriented model? Explain the important characteristics of object oriented approach. **(08 Marks)**
    b. What are links and associations? Write and explain UML notation for links and association with an example. **(08 Marks)**

OR

2   a. Define reification. Explain it with a diagram. **(08 Marks)**
    b. What is aggregation and composition? Give their respective UML notations with an example. **(08 Marks)**

Module-2

3   a. Explain briefly detailed object-oriented requirements definitions. **(08 Marks)**
    b. Explain the notation used in use case diagram. with example. **(08 Marks)**

OR

4   a. Illustrate the system sequence with diagrams. **(08 Marks)**
    b. List the propose of system diagrams with SSD notations. **(08 Marks)**

Module-3

5   a. Explain the different stages of software development process. **(08 Marks)**
    b. Explain briefly the system conception for an automated tiller machine. **(08 Marks)**

OR

6   a. Explain the various steps to construct a domain class model. **(08 Marks)**
    b. Briefly explain the different concepts for iterating the analysis. **(08 Marks)**

Module-4

7   a. Briefly explain the steps involved in design the class design. **(08 Marks)**
    b. Illustrate the concept of bridging the gap to design. **(08 Marks)**

OR

8   a. Describe the detailed steps of design by use case realization. **(08 Marks)**
    b. List the primary responsibilities of view layer, domain layer and data access layer. **(08 Marks)**

Module-5

9   a. What is design pattern? Explain in brief the four essential elements of pattern. **(08 Marks)**
    b. Describe in brief in design patter using a consistent format. **(08 Marks)**

OR

10 a. Explain the benefits and liabilities of abstract factory pattern. **(08 Marks)**
    b. Explain with diagram the object adapter class. **(08 Marks)**

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