Code No: R1631053

R16

SET - 1

III B. Tech I Semester Supplementary Examinations, May - 2019
OBJECT ORIENTED ANALYSIS & DESIGN USING UML
(Computer Science and Engineering)

Time: 3 hours   Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answer **ALL** the question in **Part-A**
3. Answer any **FOUR** Questions from **Part-B**
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PART –A

1. a) What is the difference between UML and OOAD? [2M]
   b) Explain with an example how to depict an asynchronous message. [2M]
   c) Explain why object oriented approach is preferable when compared to other approaches? [2M]
   d) Define Association and Aggregation. [3M]
   e) Define package and draw the UML notation for Package. [3M]
   f) Define Events, States and Transitions. [2M]

PART -B

2. a) Consider the building of a house. Explain the concept of Modularity and how modularity helps better work allocation and better performance. [7M]
   b) What is the importance of modeling in object oriented and explain modeling principles. [7M]

3. a) What is a nature of Class and Object? How to identify Classes and Objects with suitable Examples. [7M]
   b) Justify the term **"Importance of Proper Classification"** with a suitable example. [7M]

4. a) Define UML. How it is used? What actually it deals about and its contents? [7M]
   b) Draw a Class diagram for Online Railway Reservation System with analysis. [7M]

5. a) Explain about forking and joining concepts in activity diagram with an example. [7M]
   b) Consider modeling a student information system. Consider the use case "student registers for a course". Draw a sequence diagram and explain briefly. [7M]

6. a) Define the following Terms. [6M]
      i) Events and Signals
      ii) Process and Thread
      iii) Time and Space
   b) Prepare an activity diagram that elaborates the details of logging into an email system. Explain the steps with a neat diagram. [8M]

7. a) Define Component. What are the differences between components and classes? How are component and interface related? [7M]
   b) Draw a diagram that shows set of nodes and their relations for library management system. [7M]

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