

End Semester Examinations - 2015-16 Even Semester - May 2016

14CS3081 Real Time Unified Modeling Language

Set A

Time : 3 hrs
Total Marks: 100

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1. a) Bring out the similarities and difference between various forms of time constraints in real time systems. (6)
b) Demonstrate the relationship between Objects and Classes in UML. (14)

OR
 2. a) Explain the requirement of Use Cases in real time system with suitable example. (10)
b) Consider an ECG monitoring system which is used for recording the electrical activity of the heart. State the purpose of identifying Use Cases for the given system. (10)
 3. a) What is the significance of UML Extension Mechanism? (8)
b) How the Objects collaboration helps to achieve system functionality? Explain with a real time example. (12)

OR
 4. a) Explain the key concepts to identify the control element objects for the development of a real time system. (8)
b) Elaborate the concept of model based development activities of ROPES process. (12)
 5. Discuss in detail about all the key strategies for object identification. (20)

OR
 6. a) With the suitable example explain about the notations used in UML diagrams. (10)
b) What are the primary advantages of Object in UML? (10)
 7. a) Define the object state behavior and explain the functions of basic UML state charts? (10)
b) Define operations and explain the various types of operations in UML? (10)

OR
 8. a) Can Object model be connected with Use Case model? Give reasons. (10)
b) Bring out the similarities of and difference between various forms of time constraints in real time systems. (10)
 9. Explain in detail about how the architectural patterns are defined in UML? (20)

Wishing you All the Best
