

Code No: **R41052**

**R10**

**Set No. 1**

**IV B.Tech I Semester Supplementary Examinations, November - 2016**

**UML AND DESIGN PATTERNS**

**(Computer Science and Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions  
All Questions carry equal marks**

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- 1 a) What does unified and model mean? What are the principles of UML? [8]  
b) Explain about the architecture of the UML. [7]
- 2 a) Explain about different kinds of relationships among classifiers. [8]  
b) What is inheritance? Discuss about multiple inheritance. [7]
- 3 a) Explain the terms Entry, Exit, internal and External transitions. [8]  
b) Draw the state chart diagram for ticket selling machine. [7]
- 4 Discuss about different diagram in architectural modeling with examples. [15]
- 5 a) What is Design pattern? Is Design pattern is similar to the UML? Explain. [8]  
b) How to use design pattern? Discuss. [7]
- 6 a) Explain about the design pattern which is useful for accessing the objects for different, distinct parts of your application [8]  
b) What are the uses and limitations of factory method? Discuss. [7]
- 7 a) What is proxy? Explain with one example. [5]  
b) Explain about the software design patterns with example. [10]
- 8 a) How to implement strategy pattern in PHP? Discuss. [8]  
b) What is observer? Write a simple implementation for observer pattern. [7]