

Code: CS8T1

IV B.Tech - II Semester – Regular Examinations – April 2016

**DESIGN PATTERNS
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Describe in detail how Model/View/Controller is used to build interfaces in Smalltalk-80. 7 M
b) Classify design patterns and tabulate design patterns in a design pattern space. 7 M
2. a) What is Lexi? Describe in detail about seven problems in Lexi's design. 7 M
b) Explain about embellishments in Lexi's user interface. 7 M
3. a) Explain the sample code of prototype design pattern. 7 M
b) Discuss about implementation issues when using the singleton pattern. 7 M
4. a) Explain the structure and participants of Bridge design pattern with an example. 8 M

- b) What is adapter pattern? Discuss the advantages and disadvantages of it. 6 M
5. a) What is the motivation of Flyweight Design Pattern? 4 M
- b) Briefly explain Proxy Design Pattern. 10 M
6. a) Explain the collaborations and consequences of Command pattern. 7 M
- b) Explain the collaborations and consequences of Chain of Responsibility pattern. 7 M
7. a) Explain the Known uses & related patterns of Visitor pattern. 7 M
- b) What is the structure & participants of Memento pattern? 7 M
8. Write notes on
- a) A Document and Learning Aid 4 M
 - b) A common design vocabulary. 3 M
 - c) An Adjunct to Existing Methods 3 M
 - d) A Target of Refactoring 4 M