

Code: CS6T2

**III B.Tech - II Semester – Regular Examinations – May 2017**

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

Duration: 3 hours

Max. Marks: 70

**PART – A**

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1.

- a) What do you understand by MVC?
- b) What do you understand by object granularity?
- c) How do we describe a design pattern? Write briefly.
- d) What is a composite pattern?
- e) What is inheritance?
- f) What is the motivation for “interpreter pattern”?
- g) What is the intent of singleton pattern?
- h) What is the applicability of Abstract factory?
- i) What is a decorator pattern?
- j) Describe the document structure meaning for a Document editor.
- k) What is the intent of chain of responsibility pattern?

## PART – B

Answer any *THREE* questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) How design patterns solve the designing problem? 8 M  
b) Write a note on “how to use a design pattern”. 8 M
3. a) Show the compositor and composition class relationships. 8 M  
b) Describe Lexi’s user interface. 8 M
4. Write about intent, motivation, structure, applicability and known uses of builder pattern. 16 M
5. a) Draw the structure of flyweight pattern. 8 M  
b) What are the issues when implementing a flyweight pattern? 8 M
6. a) What is the intent and structure of observer pattern? 8 M  
b) Write about implementation of observer pattern. 8 M