Code: CS8T1

IV B.Tech-II Semester–Regular/Supplementary Examinations–April 2017

DESIGN PATTERNS
(COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours   Max. Marks: 70

Answer any FIVE questions.   All questions carry equal marks

1. a) What is Design Pattern? Describe the essential elements of
    Design Pattern.   7 M

   b) Explain how Design Patterns solve Design Problems?   7 M

2. a) Describe design problems, document structure, user
    interfaces, supporting tool systems that are needed for
    designing a document editor using Design Patterns.   7 M

   b) Explain the basic responsibilities of Glyphs in detail.   7 M

3. a) What are the features of creational patterns? Explain.   7 M

   b) Explain the structure of builder design pattern with class
    diagram and describe the collaboration with a sequence
    diagram.   7 M

4. a) Explain in detail about adapter pattern.   7 M

b) Design a graphic application by composite pattern. Explain. 7 M

5. a) What are the various consequences of the decorator patterns? 7 M

b) Explain flyweight with an application. 7 M

6. a) Explain the chain of responsibility pattern with an application. 7 M

b) Explain the command pattern with an application. 7 M

7. a) Explain the mediator pattern with an application. 7 M

b) Explain the template method pattern with an application. 7 M

8. a) Explain what to expect from design patterns. 7 M

b) Illustrate Alexander's pattern language. 7 M