Code: CS6T2

III B.Tech-II Semester–Regular/Supplementary Examinations–March 2019

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) Define the Design Pattern elements.

b) Explain the MVC objects.

c) List the types of user operations.

d) Explain the spelling checking goals and constraints.

e) Define the abstract factory pattern.

f) Identify the benefits of singleton.

g) Compare between the decorator pattern and façade pattern.

h) Define the flyweight design pattern and its consequences.

i) Distinguish any two points between the observer and visitor.

j) Classify the memento consequences.

k) List the most common techniques for reuse object composition over class inheritance.

PART – B

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

$$3 \text{ x } 16 = 48 \text{ M}$$

2. a) Show the origination of catalogs & design patterns
      relationship.   8 M

   b) Examine the how to use design patterns to solve design
      problems.   8 M

3. a) Determine the Glyphs Document Structure in detail. 8 M

   b) Differentiate between the class and subclasses of iterator
      and the visitor.   8 M

4. a) Demonstrate the abstract factory motivation and
      structure with an example.   8 M

   b) Examine in details about the builder structure,
      participants & collaborations.   8 M

5. a) Illustrate the bridge motivation and structure with an
      example.   8 M

   b) Apply the proxy class model with a telephone record
      example with neat diagram.   8 M

6. a) Apply the chain of responsibility for handling events in a graphical hierarchy. 8 M

b) Discuss the use of iterator pattern. Write a code for iterator interfaces in Java for adding two Iterators. 8 M