

Code: CS6T2

**III B.Tech-II Semester–Regular/Supplementary Examinations–March 2018**

**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) List out any four design patterns in the catalog of design patterns?
- b) List the classification of design patterns?
- c) Write about command history in the context of ‘User Operations’, design problem of Lexi’s design?
- d) List out any four design patterns used to solve the design problems of Lexi’s design?
- e) Draw the structure of singleton design pattern?
- f) List out the four participant of factory method design pattern?
- g) List out the four participant of adapter design pattern?
- h) Describe in brief any two consequences of bridge pattern?
- i) Draw the structure of Iterator design pattern?
- j) List out the participants of observer design pattern?
- k) List out any four participants of visitor design pattern?

## PART – B

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

3 x 16 = 48 M

2. a) Explain the design patterns in Small Talk MVC? 8 M
- b) Explain about consistent format for describing design patterns in detail? 8 M
3. a) What is Lexi? Describe in detail about seven problems in Lexi's design? 8 M
- b) Explain about two embellishments in Lexi's user interface? 8 M
4. a) Describe in detail about structure, participants and collaborations of builder pattern? 8 M
- b) Describe in detail about applicability, structure and participant of prototype pattern? 8 M
5. a) Describe several issues to be considered when applying the structural pattern, decorator? 8 M
- b) Describe in detail about the participants and consequences of flyweight pattern? 8 M

6. a) Explain in detail about the structure and participants of strategy design pattern? 8 M

b) Give a detailed note on Alexander's Pattern Languages? 8 M