

Code No: 57054

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, February/March - 2016

DESIGN PATTERNS

(Computer Science and Engineering)

Time: 3 Hours

Max. Marks: 75

Answer any Five Questions

All Questions Carry Equal Marks

- 1.a) Define Design Pattern. What are the applications of a Design Pattern?
- b) What is the difference between Inheritance and composition? Give examples.
- c) Write notes on organizing the catalog of Design Pattern. [5+5+5]
2. Briefly explain the following of a Lexi design:
 - a) Designing a Document Structure.
 - b) Embellishing the user interface.
 - c) Supporting Multiple Window Systems. [5+5+5]
- 3.a) Explain the motivation of an Abstract Factory Design Pattern.
- b) What are the benefits and liabilities of Abstract Factory Design Pattern?
- c) What are the uses of Abstract Factory Design Pattern? [5+5+5]
- 4.a) Draw the structure of Bridge Design Pattern.
- b) List the Participants of Bridge Design Pattern. Explain.
- c) What are the issues to be considered while implementing Bridge Design Pattern? [5+5+5]
- 5.a) Explain Decorator Design Pattern.
- b) Write notes on Flyweight Design Pattern. [7+8]
- 6.a) What are the differences between Creational Patter, Structural Pattern, and Behavioral Pattern?
- b) Give the Intent of the following Design Patterns:
 - i) Chain of Responsibility
 - ii) Command
 - iii) Interpreter
 - iv) Iterator. [7+8]
- 7.a) Explain Observer Design Pattern.
- b) Write notes on Visitor Design Pattern. [8+7]
8. Write notes on following:
 - a) Object Granularity
 - b) Frameworks
 - c) Pattern Community. [5+5+5]

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