

Code No: 155SG

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, February - 2022

DESIGN PATTERNS

(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Describe essential elements of design patterns.
b) How to use a design pattern? Explain in detail. [7+8]
- 2.a) Discuss about design patterns in Smalltalk MVC.
b) Explain about specifying object implementations. [8+7]
- 3.a) Describe supporting multiple window systems in Lexi's design.
b) Explain about encapsulating access and traversal. [8+7]
- 4.a) Discuss about encapsulating a request.
b) Briefly explain about supporting multiple look-and-feel standards. [7+8]
- 5.a) Write and explain the sample code of Builder pattern.
b) Discuss about subclassing the Singleton class with sample code. [8+7]
- 6.a) Describe implementation of Prototype pattern.
b) Explain about consequences of Factory Method pattern. [8+7]
- 7.a) Describe implementation of Adapter pattern.
b) Discuss about structure and participants of Bridge pattern. [8+7]
8. Explain the following:
a) Structure of Memento pattern
b) Sample code of Strategy pattern. [7+8]

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