

<b>UNIT-I</b>	
<b>1</b>	What is Design pattern? Explain the four essential elements of a pattern.
<b>2</b>	Describe the general template of design pattern? Explain each field.
<b>3</b>	What are design problems? Explain how design pattern related to design problems.
<b>4(a)</b>	List the advantages of design patterns.
<b>(b)</b>	Illustrate the use of design patterns.
<b>5</b>	How you can solve Design problems with Design patterns
<b>6(a)</b>	Explain the Design pattern in small talk MVC.
<b>(b)</b>	Model the flow chart of relationships in Design pattern
<b>7</b>	How to select and use a Design pattern for Design problems.
<b>8</b>	Outline the importance of design patterns in OO development with examples.
<b>9(a)</b>	List the Principles and Strategies of Design Patterns with examples.
<b>(b)</b>	List the advantages of Software Design Patterns over structural development.
<b>10</b>	List various Categories of Design Patterns and write about each Pattern.
<b>UNIT-II</b>	
<b>1</b>	What are the different creational patterns and explain their Intents and Motivations.
<b>2</b>	Explain Abstract Factory Pattern with a neat diagram
<b>3</b>	Explain Singleton Pattern with structure and its consequences?
<b>4</b>	Demonstrate the Double-Checked Locking Pattern with a neat diagram
<b>5</b>	Illustrate the concept of Object Pool Pattern Management in OO system design

<b>6</b>	Demonstrate the Factory Method Pattern with a neat diagram
<b>7</b>	List the participants of singleton pattern? Give one example for singleton
<b>8</b>	Identify the structure, participants and collaborations of Builder pattern.
<b>9</b>	Model prototype pattern and discuss different issues While implementing prototype pattern
<b>10</b>	List the consequences of Abstract Factory pattern.
<b>UNIT-III</b>	
<b>1</b>	Analyse and Explain the motivation, applicability and structure of bridge pattern
<b>2</b>	Explain in detail about the intent and motivation of Proxy structural pattern.
<b>3</b>	List the Participants and Consequences of Composite pattern.
<b>4(a)</b>	Why proxy pattern is required explain.
<b>(b)</b>	Distinguish how bridge is different from proxy
<b>5</b>	Explain in detail about adapter pattern
<b>6(a)</b>	Illustrate the intent and motivation of Façade pattern.
<b>(b)</b>	When can be a Flyweight pattern effectively is applicable? Explain in detail.
<b>7</b>	Model the structure of fly weight pattern and Discuss motivation, applicability of fly weight pattern
<b>8(a)</b>	Model and Explain the adapter structural Pattern with example.
<b>(b)</b>	List the consequences of Composite pattern.
<b>9</b>	What are Structural patterns explain any two with neat diagram
<b>10</b>	Model and Explain structure of Decorator pattern and its consequences when it is used

<b>UNIT-IV</b>	
<b>1</b>	List Behavioral patterns and explain any two with neat diagram
<b>2</b>	Explain chain of responsibility pattern in detail
<b>3</b>	Demonstrate the Command behavioral pattern
<b>4</b>	Analyze the intent of Chain of Responsibility design pattern? And Discuss its motivation in detail.
<b>5</b>	Explain in detail about the iterator design pattern
<b>6</b>	Model and Explain in detail about the structure and applicability of Command pattern.
<b>7</b>	Demonstrate the mediator design pattern
<b>8</b>	Analyze the motivation and collaboration of Iterator behavioural pattern.
<b>9</b>	List the Participants and consequences of Mediator pattern.
<b>10</b>	Model and explain in detail the structure of Interpreter pattern.
<b>UNIT-V</b>	
<b>1</b>	Explain the Template Method Pattern with a neat diagram.
<b>2</b>	Illustrate the Motivation, Collaborations of Memento pattern.
<b>3</b>	Demonstrate Observer Pattern with a neat diagram
<b>4</b>	List the benefits and liabilities of the Visitor pattern.
<b>5</b>	Explain the Strategy Pattern with a neat diagram
<b>6</b>	How can we apply the Template Method to real world problems?
<b>7</b>	Model and Explain the Structure of memento pattern
<b>8</b>	List the Participants, Consequences and applicability of State Behavioural pattern.
<b>9</b>	Analyze and explain about the motivation and applicability of Observer Design pattern.
<b>10</b>	Model and Explain the Structure of state pattern

<b>UNIT-VI</b>	
<b>1</b>	Explain multiple window systems to better look and feel of Lexi's User interface.
<b>2</b>	How to construct a particular physical structure corresponding to a properly formatted document
<b>3</b>	Analyze and Explain the Lexi's functionality of user operations for document's WYSIWYG representation
<b>4(a)</b>	List the different problems in Lexi's Design
<b>(b)</b>	List and Explain two embellishments in Lexi's user interface.
<b>5</b>	Identify and Explain multiple look and feel standards for achieving portability among hardware and software.
<b>6</b>	Identify the design problem involves textual analysis, specifically checking for misspellings and introducing hyphenation points where needed for good formatting
<b>7</b>	Model the document structure in the case study of Document Editor
<b>8</b>	Analyze and Explain in detail about achieving portability across hardware and software platforms by supporting multiple look and feel standards.
<b>9</b>	List various user interface Embellishments and Explain the following Lexi's user interface Embellishments i) Transparent Enclosure ii) Monoglyph
<b>10</b>	Illustrate Lexi's user interface with a diagram and discuss design problems in Lexi.