VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAVI

SOFTWARE ARCHITECTURE AND DESIGN PATTERN
(15is72)

(As per Visvesvaraya Technological University Syllabus)

Complied By:

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Module-I

1. What is design pattern? How pattern and frameworks are different (6M JAN 2019)

2. Explain Object oriented development (4M JAN 2019)

3. What are the key concepts of Object oriented design (6M JAN 2019)

4. What does the design pattern do? How to select a design pattern (6M JAN 2019)

5. What pitfalls, hints or techniques should be aware of when implementing the pattern (6M JAN2019)

6. Describe the benefits to manipulating objects solely in terms of the interface defined by the abstract classes (4M JAN2019)

7. What is design pattern? Explain essential elements of design patterns (8M JULY 2019)

8. Define object oriented development. Explain key concepts of object oriented design (8M JULY 2019)

9Explain how to choose right design pattern for your problem (8M JULY 2019)

10Analyze step by step approach of applying a design pattern effectively (8M JULY 2019)

Module-II

1. The analysts need to learn the existing system and the requirements justify (5M JAN2019)
2. What are the guidelines to remember when writing the use cases? (4M JAN2019)
3. Draw class diagram for library and class diagram for member of library (7M JAN 2019)
4. Explain the major steps in Analysis phase (6M JAN 2019)
5. Compare functional requirements versus non functional requirements

(4M JAN 2019)

6. Describe the conceptual software and implementation classes (6M JAN 2019)
7. What is Use case analysis? Draw neat use case diagram for librarysystem and also explain Register user use case with proper description (10M JULY 2019)
8. Define FAÇADE design pattern. Explain with neat diagram (6M JULY 2019)
9. Explain the activities involved in analysis phase (8M JULY 2019)
10. During the design process what are the questions to be answered? 8M JULY 2019)

Module III

1. How objects and classes are composed to form larger structure (4M JAN 2019)
2. Explain Intent , motivation, Applicability, Structure, Participants, Collaboration, Consequences and Implementation of Decorator Pattern (8M JAN 2019)
3. Mention few common situations in which the Proxy pattern is Applicable (4M JAN 2019)
4. What do you mean by part-whole hierarchies? Explain with suitable example (5M JAN2019)
5. Explain an object adapter and a class adapter (5M JAN 2019)
6. What are the issues to consider when implementing the Composite pattern (6M JAN 2019)
7. Explain the applicability and structure of a adapter pattern (8M JULY 2019)
8. Describe the motivation of composite pattern with neat diagram (8M JULY 2019)
9. Explain the issues to be consider while implementing the decorator pattern (8M JULY 2019)
10. Describe structure and participants of Proxy pattern (8M JULY 2019)

Mosule IV

1. Explain the model view controller pattern in detail (6M JAN 2019)
2. Draw and Explain sequence diagram for adding a line (M JAN 2019)
3. Mention the characteristics of Architectural Patterns (5M JAN 2019)
4. What are the benefits of design of subsystems?(4M JAN 2019)
5. Explain the issues need to be highlighted when implementing the UNDO operations (6M JAN 2019)
6. Describe the implementation of view class with example (6M JAN 2019)
7. With neat diagrams explain MVC architecture and alternate view of the MVC architecture (8M JULY 2019)
8. Explain the characteristics of architectural patterns in pattern based solutions. (8M JULY 2019)
9. Define the controller. Explain the steps involved in defining the controller (8M JULY 2019)
10. With neat diagram the design of the view subsystem (8M JULY 2019)

Module V

1. Explain the performance of client server Systems (5M JAN 2019)
2. How the library system can be deployed on the World-Wide-Web? (5M JAN 2019)
3. Describe the difficulties in accessing objects in a different SVM (6M JAN 2019)
4. Explain how to implement Object-oriented system on the web (5M JAN 2019)
5. List and Explain for hosting distributed applications (5M JAN 2019)
6. Write short notes on i)Marshalling and De-marshalling ii)GET or POST (6M JAN 2019)
7. Explain the architecture of client-server systems (8M JULY 2019)
8. How to develop the user requirements? Explain steps involved in it. (8M JULY 2019)
9. Explain the process of implementing a remote interface (10M JULY 2019)

10. Compare GET and POST methods (6M JULY 2019)