

## **Question Bank - 2**

### **SOFTWARE DESIGN**

1. How Modularity affects the software cost. Explain.
2. Illustrate various Design Concepts.
3. Explain the concept of cohesion and coupling. Give example of Low cohesion.
4. Define various types of coupling. Also, arrange these in the order from best to worst.
5. Define Cohesion. Discuss various types of cohesion and give example of each.
6. Write four activities (designs) that may be part of the design process for information systems.
7. Briefly illustrate General model of Design Process with its four designs.
8. What are (Discuss) attributes of design quality.
9. Explain the term Software Architecture. Discuss its importance.
10. Discuss various software architecture.
11. How user interface design is evaluated?
12. Discuss Component Based Design (CBD)
13. Explain four levels of UI design.

### **Other important questions:**

- Drawing Class Design
- Converting Sequence diagram to Class diagram.

### **SOFTWARE IMPLEMENTATION AND TESTING**

1. Depict using a diagram the Testing phases in a plan driven software process.
2. Discuss four levels of testing. Write Test cases for System Test for input of numeric month into data field. For example: on entering 6 or 06, the month field accepts and display June.
3. Write about various types of Non-Functional Testing.
4. Write a Test Case for the scenario: Check Login Functionality.
5. Explain V-model of Testing in detail.
6. Why we perform Structural (Glass Box) Testing? Write Knowledge Requirement and Limitations of it.
7. Differentiate between Alpha and Beta testing.

8. You have been asked to test a method called 'catWhiteSpace' in a 'Paragraph' object that, within the paragraph, replaces sequences of blank characters with a single blank character. Identify testing scenarios for this example and derive a set of tests for the 'catWhiteSpace' method.
9. Discuss stages of testing process.
10. What are the Characteristics of a good test case? Write a Test Case for a Browser Window. (Example: window minimize, maximize, and close functionality).
11. Write Key features of Testing in Extreme Programming.
12. Write about various types of Non-Functional Testing.
13. Discuss the ways to perform testing.
14. Define various test artefacts.
15. Give examples of each type of testing.

### **Software Configuration Management**

1. Discuss the importance of Software Configuration Management (SCM) in Software Project Management.
2. Using examples, explain why configuration management is important when a team of people are developing a software product.
3. Discuss the following terms: Configuration Item, Baseline SCM Directories, Version, Revision, and Release.
4. Differentiate between Software Re-engineering and Reverse Engineering.
5. Discuss CMMI levels.

### **SOFTWARE MANAGEMENT AND PROCESS IMPROVEMENT**