PART – B (4 Marks)

1. **Mention the three goals of the software design process and brief them.**
2. **Categorize the various architecture partitioning techniques. List out the advantages of partitioning the architecture**
3. **With an example draw any component structure highlighting the archetypes**
4. **Code reuse can reduce the labor intensive nature of writing source code. List out methods that can achieve the same.**
5. **Describe automatic code generation.**
6. **How significant is a software design for a software system?**
7. **Enlist the benefits of Top-Down approach?**
8. **List out the Characteristics of a software product code that requires refactoring which becomes necessary to change the internal structure of software code.**
9. **Explain in detail various coding methods which convert design into optimal software construction.**
10. **Explain the design life-cycle management with neat sketch**
11. **Explain how to Translating the requirements analysis model into the design model**
12. **List out five mandatory constraints for navigation modeling.**
13. **List down the characteristics of a good software design and brief any one with an example.**
14. **Illustrate the bottom up approach in software design methods**
15. **Summarize the concept of Pair programming and its advantages in software engineering.**
16. **What is the difference between content architecture and web app architecture?**
17. **Discuss configuration model for web based application.**
18. **Who is responsible for configuration management? Brief.**
19. **What are the steps involved in User-Interface Design?**
20. **Illustrate the advantages of Test-driven development.**
21. **List out the problems involved in software reuse.**

PART – C (12 marks)

1. **Illustrate the steps to represent a typical task set for component-level design, when it is applied for an object-oriented system.**
2. **IrisGold is a gold mining company that operates on three continents, with more than 21,000 employees. The company's mines are mostly located in remote places like the Amazonas in Brazil, the Andes mountain range, the Ural mountains in Russia, and eastern South Africa. The company is selecting an Enterprise Resource Planning (ERP) system package. Suggest Which architecture is suitable to build the same with a neat diagram and a suitable description**
3. **Illustrate with appropriate reasons regarding why configuration management plays a significant role in software construction**

4. **How significant is quality control for software construction ? Explain them in detail.**
5. **Amaze is a project management software company. Their product is sold globally with a monthly pay-per-user model and widely known among the project management community for being easy to use and able to operate on many different devices (PCs, Notebooks, laptops, tablets, iPhones, iPads, and Android phones). The business problem is very straightforward: Amaze must work on any popular device on the market and be able to support future devices. There must be only one version of the software for all devices. No special cases, no exceptions allowed**

   Suggest Which architecture is suitable to build the same with a neat diagram and a suitable description
6. **Explain about software coding standards with a neat sketch**
7. **How to ensure reusability of code in a software project? Elaborate on code reuse operational and technical challenges.**
8. **Draw use case diagram and two interaction diagrams for coffee vending machine (The coffee vending machine is a vending machine that dispenses hot coffee and other coffee beverages).**
9. **Explain the various Software code reuse methods and gives the reasons of using coding methods.**
10. **Compare and contrast Reviews, Deskchecks, Walkthroughs and Inspections.**
11. **Write about any four of the software design types highlighting its need and its process.**
12. **Use Case: Automatic Water Pump Controller**

    An automatic water pump controller circuit that controls the water pump motor. The motor gets automatically switched on when water in the overhead tank (OHT) falls below the lower limit. Similarly, it gets switched off when the tank is filled up. Based on this application frame the pattern, intent, behavioral model and class diagram
13. **Briefly explain the Automatic Code Generation.**
14. **Categorize the various coding standards and explain its characteristics with examples.**