**Software Engineering**

**Assignment**

1. Which of the following software process model is more effective? Incremental model or linear sequential model.
2. Write the difference between direct metric and indirect metric. Give one example for both the metric.
3. What do you mean by reactive and proactive risk strategies?
4. List and briefly explain the characteristics of SRS.
5. Explain the layers of CMMI.
6. State the significance of Gantt chart and Pert chart for scheduling and monitoring a software project.
7. What do you understand Risk Exposure? In a component based system 60 reusable software components were planned. From these components only 70% can be used, rest have to be developed from the scratch. Cost for each LOC is $14. The probability of this risk occurrence is 80%. Compute risk exposure.
8. Use the COCOMO II model to estimate the effort required to build software that produces 10 screens and 8 report, and will require 80 software components. Assume average complexity screen-2, reports-5, 3CGL components -10 and average/developer/environment maturity as 13. Use the application composition model with object points.
9. List and explain the measures of software quality.
10. At the conclusion of a project, it has been determined that 35 errors were found during the modeling activity and 16 errors were found during the construction activity. What is the defect removal efficiency for this activity?
11. Explain any three ways to achieve reliable cost and effort estimates?
12. List and briefly explain the types of system testing.
13. What are two approaches used for designing hierarchy of components when we are designing a software?
14. What is cohesion? List and briefly explain the types of cohesion.
15. What is coupling? List and briefly explain the types of coupling.
16. What are software reviews? Explain Defect Amplification Model when no reviews are conducted?
17. What is Transform Mapping?
18. Explain five elements of software quality assurance.
19. List the components of risk table. Draw the structure of table.
20. Explain testing strategy with the help of neat and clean diagram.
21. What is smoke testing?
22. What are the differences between alpha and beta test?
23. When Umbrella activities do occurs? List any three of them.
24. How do we assess the consequences of risk? How is overall risk exposure determined?