(1) Describe the software life cycle briefly.

(2) Explain the differences between Verification and Validation and list one methodology for Verification and one for Validation.

(3) Explain what is a test plan and what is it’s purpose; What should be included in a test plan?

(4) Explain how test coverage is used as a measure of test case completeness.

(5) List at least two white box testing techniques and compare their ability in error detection. (explain with an example!)

(6) What is a dynamic program slice? Explain how program slicing can be used to improve program reliability.

(7) What are CASE tools and what are their uses? (explain briefly)

(8) Describe the Clean Room Process. List the advantages and disadvantages of using this approach.

(9) List three different approaches that provide software fault tolerance and compare their strengths and weaknesses.

(10) What is software reliability; what are the uses of software reliability measure and how to estimate this metric? (You can use one of the existing approaches and explain it briefly)