

CS706 - Software Quality Assurance

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Expected Questions for Mid Term

1. Write data recording and reports steps of inspection process? Various roles and responsibilities regarding inspection, Explain it from ETVX? **[Page 78]**
2. Define ETVX model in detail? **[Page 60]**
3. Preparation activity of inspection main role ETVX with preparation? **[Page 70]**
4. Write a note on follow-up step of inspection? Write its roles and responsibilities also note on ETVX? **[Page 76]**
5. Write the inspection planning with ETVX model? **[Page 66]**
6. What is Overview in inspection process, write the ETVX model of overview? **[Page 68]**
7. Use of ETVX in model inspection? [Without diagram] **[Page 71]**
8. What is rework process write roles and responsibility who conduct this process write ETVX model for this? **[Page 75]**
9. What are requirement? Write their types in detail? What are the Impact of wrong Requirements? **[Page 20, 27]**
10. Explain quality laggards, Write its characteristics? **[Page 10]**
11. Define coupling and describe types of coupling? **[Page 44]**
12. Explain data and reports regarding the inspection and also describe defects in data and reports regarding inspection.
13. What are kinds of review? What are different roles of review? **[Page 50]**
14. What is software quality, describe the key factor which are considered in the definition? **[Page 02]**
15. Guideline for good design? **[Page 40]**
16. Why software inspection are cheaper then software Testing compared the difference? **[Page 55]**
17. Write defect removal of 5 fundamental for software Design? **[Page 04]**
18. What are different defect elimination strategies? Describe testing and non-testing defect removal methods? **[Page 04]**
19. What is meant by quality design concept? Describe Abstraction in detail? **[Page 41]**
20. What is SQA group what activities performed by group? **[Page 13]**
21. Ancillary purposes of inspection? **[Page 62]**
22. Defect prevention methods? **[Page 04]**

- 23. Project Management Approaches? **[Page 13]**
- 24. Guidelines for writing Good Requirements? **[Page 29]**
- 25. What is Follow-Up? Responsibility and roles of Follow-Up? **[Page 76]**
- 26. Quality attributes of requirements documents any 10? **[Page 32]**
- 27. Code of conduct for moderator in inspection? **[Page 84]**
- 28. Cohesion and its types? **[Page 43]**
- 29. What are the purposes of inspections explain productivity and backup/replacement? **[Page 61]**
- 30. What are software defects? How these effects adverse the software with example? Also define different types of the defects? **[Page 03]**
- 31. How project management ensure high quality of software? **[Page 13]**

Expected Questions for Final Term

- 1. Explain Design test cases? **[Page 101]**
- 2. Explain Broad categories of software testing. **[Page 102]**
- 3. What is white box testing question and what is the answer to the question? **[Page 103]**
- 4. Explain Black box testing and approaches? **[Page 103]**
- 5. Briefly explain White Box Testing and also name various white box testing techniques? **[Page 103,104]**
- 6. Briefly explain the white box testing “basic path testing”? **[Page 106]**
- 7. Explain conditional testing? **[Page 108]**
- 8. Briefly explain the white box testing technique “loop testing”? **[Page 109]**
- 9. Briefly explain the black box testing technique “Equivalence partitioning”? **[Page 112]**
- 10. Describe BBT "Boundary Value Analysis" technique? **[Page 113]**
- 11. Explain testing strategies? **[Page 114]**
- 12. Explain Defects and describe types of CTS (Common Testing Strategy) in designing software? **[Page 114]**
- 13. Explain integration testing in detail? **[Page 115]**
- 14. Briefly explain unit testing? **[Page 116]**
- 15. Define process of debugging in detail? **[Page 122]**
- 16. Explain Debugging and its approaches? **[Page 122]**
- 17. Describe the Characteristics of bugs/defects? **[Page 123]**
- 18. Benefits of automated tests cases define process of debugging? **[Page 132, 122]**
- 19. What are the benefits of automated tests cases? **[Page 133]**
- 20. Write the Evaluation criteria for test tools? **[Page 134]**
- 21. Briefly explain the design of test cases? **[Page 136]**
- 22. What are some observations about the testers? **[Page 138]**
- 23. When do we stop testing and when do we a test is completed? **[Page 139]**
- 24. Explain Briefly the Activities step of SCM? **[Page 140]**

25. Procedure for development of SCM? **[Page 140]**
26. Describe SCM Functions in Detail? **[Page 143]**
27. Explain the best change control? **[Page 143]**
28. Explain SCM status accounting and reporting? **[Page 144]**
29. Briefly explain the SCM function status accounting/reporting? **[Page 146]**
30. Explain SCM function infuse visibility? **[Page 151]**
31. Explain SCM staffing? **[Page 152]**
32. Briefly explain SCM staffing the real word consideration for SCM? **[Page 152,153]**
33. Explain Establishment of CCB and SCM in accepting test cycle? **[Page 154]**
34. Briefly explain the procedure of creating the configuration management system? **[Page 156]**
35. What are the Practices for maintaining versions of software artifacts? **[Page 156]**
36. Describe procedure to create the configuration management system? **[Page 157]**
37. What is the best change control? **[Page 158]**
38. What are the Measurement for outsourcing project? **[Page 159]**
39. What are the best practices for commercial and military software projects? **[Page 160]**
40. Explain IEEE SCM plan in detail? **[Page 162]**
41. Briefly explain the “introduction” section of IEEE SCM plan? **[Page 162]**
42. Explain Activities step of SCM? **[Page 163]**
43. Explain review and audits in planning and organization? **[Page 163]**
44. Briefly explain the “activities” section of IEEE SCM plan? **[Page 164]**
45. Write the IEEE SQAP management section? **[Page 165]**
46. Explain "Reviews and audit” section of IEEE SQAP? **[Page 167]**
47. Pictorial view of planning and management and explain schedule monitoring? **[Page 169,170]**
48. Explain estimation and project tracking in detail? **[Page 171]**
49. Explain steering committee, project risks? **[Page 171]**
50. Explain Establish Measurement Process? **[Page 172]**
51. How do we establish measurement program? **[Page 172]**
52. Explain step before process improvement? **[Page 177]**
53. Briefly explain the CMM level 3 and level 4? **[Page 180]**
54. Explain the CMMI capability model? **[Page 183]**
55. Briefly explain the six capability level of CMMI? **[Page 189, 190]**
56. What are the other questions related to quality metrics? **[Lecture 41]**
57. Explain benefits of quality metrics? **[Page 192]**
58. What are the Software Metrics? **[Page 193]**
59. What are the benefits of software metrics? **[Page 193, 194]**
60. What are the seven tracked measures explain every measure? **[Page 195]**
61. Briefly explain quality metric function point? **[Page 196]**
62. Explain the quality metric function Unit.? **[Page 198]**
63. Define Density of defect" "mean time failure “and” defect severity? **[Page 198]**

64. How customer satisfaction can be measured? **[Page 199]**
65. Define test effectiveness, defect by phase metrics? **[Page 200]**
66. Briefly explain defect arrival rate? **[Page 200]**
67. Explain software maintenance backlog indexes and fix response time? **[Page 202]**
68. Write note on cyclometer complexity, Problem complexity, Algorithmic complexity, structural complexity, cognitive complexity? **[Page 207]**
69. Write a note on cyclometric complexity? **[Page 209]**
70. Write guide lines for developing test plan? **[Page 236, 237]**
71. Briefly explain the design defects because of the “structure of the application” and “data elements”? **[Page 37]**

*** Please remember me in your prayers 😊