

Sample Exam Questions for SE

Score	Evaluator	Section I: Completion by Matching. Identify the letter of the choice that best complete each statement.

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| <ul style="list-style-type: none"> A. Availability B. Activity C. Client-server D. Context E. Development F. Ethnography G. Equivalence partition H. Functional requirements I. Heterogeneity J. Interaction K. Open-source L. Pair programming M. Pipe and filter | <ul style="list-style-type: none"> N. Reuse O. Scenario testing P. Sociotechnical systems Q. Specification R. System requirements S. Technical systems T. Test-driven U. Use-case V. User interfaces W. User requirements X. Validation Y. Verification Z. Workflow |
|---|--|

- _O_ 5. _____ is an approach to release testing where you write a story describing how a system may be used and design tests based on the sequence of events in the scenario.
- _P_ 6. _____ is/are self-aware and include defined operational processes and procedures.
- _A_ 7. _____ is the ability of a system to deliver services when requested.
- _L_ 19. Requirements expressed as scenarios, _____, and test-first development are three important characteristics of extreme programming.
- _W_ 20. _____ are statements in a language that is understandable to a user of what services the system should provide and the constraints under which it operates.

Score	Evaluator	Section II: Multiple Choices. Identify the choice that best completes the statement or answers the question.

- _D_ 21. ____ is the phenomenon where a module in a system implements or partially implements a number of different system requirements.
- | | |
|---------------|-------------|
| a. Concerning | c. Floating |
| b. Scattering | d. Tangling |
- _D_ 22. Which is **NOT** one of the 4 levels at which software reuse is possible?
- | | |
|--------------------------|----------------------------|
| a. The abstraction level | d. The specification level |
| b. The object level | e. The component level |

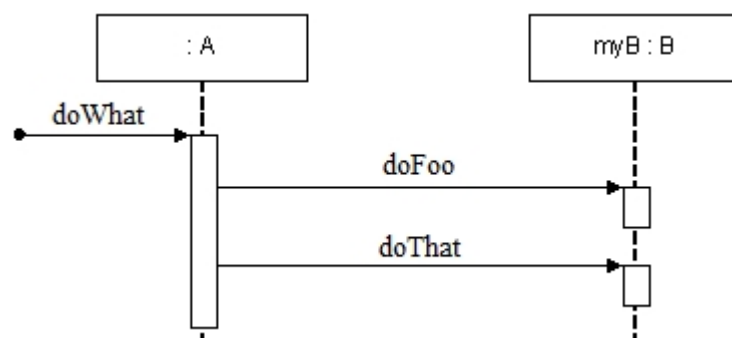
- c. The system level
- _E_ 23. Which is **NOT** one of the principal system re-engineering activities?
- a. Source code translation d. Reverse engineering
- b. Program structure improvement e. Program Debuging
- c. Program modularisation f. Data re-engineering
- _A_ 24. Which is **NOT** one of the four principal dependability properties?
- a. Understandability d. Reliability
- b. Availability e. Safety
- c. Security
- _B_ 25. Which is **NOT** one of the 4 sectors in each loop in Boehm's spiral model?
- a. Objective setting d. Risk assessment and reduction
- b. Feasibility study e. Development and validation
- c. Planning

Score	Evaluator	Section III: Short Answer. Please Select (mark a ✓ before the No. of the question chosen) and briefly answer 2 from the following 3 questions. (Question 31~33, 9 pts for each short answer, totally 18 pts)

- _____ 31. Explain, using examples as appropriate, what is meant by the following architectural style (choose only one from the following four styles):
- a. Pipes and filters architecture
- b. Layered architecture
- c. Client-server architecture
- d. Object-oriented architecture

Score	Evaluator	Section IV: Design Problems.

32. Consider the following Sequence Diagram in design stage, draw a equivalent communication diagram and write down the corresponding code segments in any object-oriented programming language for class A and class B.



Score	Evaluator	Section V: Essay. Answer the following question.

35. (? related to the course projects)