

Students' SE Knowledge Test

This study is attempting to find out the knowledge test on Software Engineering subject of students in engineering programs. The information gathered will be used toward the completion of my PhD thesis only. I want you to know that:

- Your participation is entirely voluntary.
- Your response will remain anonymous and confidentiality will be maintained.
- Neither your class standing nor your grades will be affected.

About you

Name: _____

Institute: _____

Department: _____

Roll No: _____

Email-id: _____

Mob No: _____

Gender: (M/F)_____

Please answer the following questions as truly as possible. (Tick those that you agree with)

Thank you for participating in this survey.

1. When is feasibility study done?

- After requirements specifications are finalized
- During the period when requirements specifications are prepared
- Before the final requirements specification is done
- Could be done at any time

2. The main objective of preparing an SRS is to:

- Let client and developers agree that they understand one another
- Formally note down the requirements
- Estimate the cost of development
- To judge whether the project could be undertaken

3. In intermediate COCOMO model, Effort Adjustment Factor (EAF) is derived from the effort multipliers by:

- Adding them
- Multiplying them
- Taking their weighted average
- Considering their maximum

4. According to Halsetad's metrics, program length is given by the:

- Sum of total number of operators and operands
- Sum of number of unique operators and operands
- Total number of operators
- Total number of operands

- 5. Generalization relationship exists between two use cases when:**
- A use case derives from a base use case
 - A use case derives from a base use case and specializes some of its inherited functionality
 - A use case includes functionality of another use case
 - No two use cases can be related
- 6. A college has an online library management system. Who is the primary actor here?**
- Librarian
 - Director of the college
 - Teacher
 - Student
- 7. In ER model, an entity is usually related to another entity. The relationship is indicated by a:**
- Rectangle
 - Ellipse
 - Triangle
 - Diamond
- 8. List of potential objects can be made from a narrative problem statement by marking the:**
- Verbs from the problem statement
 - Adjective from the problem statement
 - Nouns from the problem statement
 - None of the above
- 9. What does the guard condition depicted over the transition between any two states indicate?**
- A condition that must be true for the transition to happen
 - A condition that must be false for the transition to occur
 - An indicator that this transition should not happen
 - An event that might happen as result of the transition
- 10. Inheritance among classes are represented by a:**
- Solid line from the extending to the extended class
 - Line with an unfilled arrow head from the extending to the extended class
 - Line with a filled diamond from the extending to the extended class
 - Dotted line with extend stereotype from the extending to the extended class
- 11. In UML 2.0, a synchronous message is represented with a:**
- Solid arrow with filled arrowhead
 - Solid arrow with empty arrowhead
 - Dotted arrow with filled arrowhead
 - Dotted arrow with empty arrowhead
- 12. How many processes are present in level-0 or context diagram?**
- 0
 - 1
 - 2
 - 3
- 13. External entities can appear in a DFD:**
- At any level
 - Only at level-0
 - Only at level-1
 - Either at level-0 or at level-1

14. According to McCabe's Cyclomatic complexity, $V(G) = E - N + 2$. Here, N is:

- No. of statements in the program
- No. of unique operators used
- No. of nodes in the CFG
- No. of edges in the CFG

15. Regression testing is primarily related to:

- Functional testing
- Data flow testing
- Development testing
- Maintenance testing

Full Signature: _____