Unit 5 - Week 3

Assignment 3

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-08-21, 23:59 IST.

1) State true or false: A definition of a variable always reaches every use *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

2) Which of the following is true about def-clear paths with respect to a variable v? *1 point*

- The variable v is not defined along the path
- The variable v is not given another value along the path
- The variable v is defined once but is not used along the path
- The variable v is defined and used along the path

No, the answer is incorrect.
Score: 0
Accepted Answers:
The variable v is not given another value along the path

3) For a variable v, which of the following refers to a simple path that is def-clear from a definition of v to a use of v? *1 point*

- Def-clear path
- Definition path
- Use path
- du-path

No, the answer is incorrect.
Score: 0
Accepted Answers:
du-path

4) State true or false: We group du-path sets by uses *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

5) Which of the following represents correct order of subsumption amongst data-flow coverage criteria in graphs? Read the symbol → below as "subsumes" *1 point*

- All-du-paths-coverage → all-uses-coverage → all-defs-coverage
- All-defs-coverage → all-uses-coverage → all-du-paths-coverage

No, the answer is incorrect.
Score: 0
Accepted Answers:
All-du-paths-coverage → all-uses-coverage → all-defs-coverage

6) Which of the following is true regarding subsumption relation among structural coverage criteria and data flow coverage criteria over graphs? *1 point*

- All-du-paths-coverage subsumes prime-path-coverage
- Prime-path-coverage subsumes all-du-paths coverage and all-defs-coverage subsumes edge-coverage
- Prime-path-coverage subsumes all-du-paths coverage and all-uses-coverage subsumes edge-coverage
- Prime-path-coverage subsumes all-du-paths coverage and all-defs-coverage subsumes node-coverage

No, the answer is incorrect.
Score: 0
Accepted Answers:
Prime-path-coverage subsumes all-du-paths coverage and all-uses-coverage subsumes edge-coverage

7) State true or false: Data could be defined in the edges of a CFG representing source code *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

8) What does cyclomatic complexity of a program represent? *1 point*

- The number of different execution paths a program can take
- The number of different paths in the CFG of a program
- The number of linearly independent paths in the CFG of a program
- The number of basis paths in the CFG of a program

No, the answer is incorrect.
Score: 0
Accepted Answers:
The number of linearly independent paths in the CFG of a program

9) State true or false: Basis path testing subsumes branch coverage *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

10)State true or false: A decision-to-decision path is the same as the basis path *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False