Unit 8 - Week 6

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Assignment 6

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

Due on 2019-09-11, 23:59 IST.

Consider the method below:

```
public String twoPred(int x, int y)
{
boolean z;
if (x < y)
z = true;
else
z = false;
if (z && x+y == 10)
return ''A'';
else
return ''B'';
}
```

Answer the following five questions related to coverage criteria over this method. Please note that the variable **z** needs to be re-written in terms of
inputs in the second predicate to achieve various coverage criteria. We use the predicate **`x < y`** to represent **z**

1) How many test inputs are needed to achieve Restricted Active Clause Coverage (RACC) for the method **`twoPred()`**? *1 point*

- One
- Two
- Three
- Four

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

2) Which of the following lists predicates that satisfy RACC for the method **`twoPred()`**? *1 point*

- `x < y:true and x + y == 10:true`
- `x < y:false and x + y == 10:false`
- `x < y:true and x + y == 10:true, x < y:false and x + y == 10:true`
- `x < y:true and x + y == 10:true, x < y:false and x + y == 10:true, x < y:true and x + y == 10:false`

No, the answer is incorrect.
Score: 0
Accepted Answers:
`x < y:true and x + y == 10:true, x < y:false and x + y == 10:true, x < y:true and x + y == 10:false`

3) State yes or no: Restricted Inactive Clause Coverage (RICC) has no feasible pairs for the predicate `p = (x < y) && (x + y == 10)` being true *1 point*

- Yes
- No

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

4) Which of the following lists predicates that satisfy RICC for the method **twoPred ()**? *1 point*

- `x < y:true and x + y == 10:true`
- `x < y:false and x + y == 10:false`
- `x < y:true and x + y == 10:true, x < y:false and x + y == 10:true`
- `x < y:false and x + y == 10:false, x < y:true and x + y == 10:false, x < y:false and x + y == 10:true`

No, the answer is incorrect.
Score: 0
Accepted Answers:
`x < y:false and x + y == 10:false, x < y:true and x + y == 10:false, x < y:false and x + y == 10:true`

5) Which of the following test values below satisfy RICC for the predicate **`p`**, with it being false? *1 point*

- `twoPred(6,5)`
- `twoPred(6,5), twoPred(4,5) and twoPred(6,4)`

No, the answer is incorrect.
Score: 0
Accepted Answers:
`twoPred(6,5), twoPred(4,5) and twoPred(6,4)`

6) How many test cases will be needed to achieve predicate coverage over a predicate with n clauses? *1 point*

- Two
- n
- $n+1$
- 2^n

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

7) State true or false: Correlated Active Clause Coverage (CACC) sub- sumes predicate coverage *1 point*

- True
- False

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

8) While applying logic coverage criteria to test specifications in conjunctive normal form, a major clause is made active by which of the following? *1 point*

- All other clauses are made true
- All other clauses are made false

No, the answer is incorrect.
Score: 0
Accepted Answers:
All other clauses are made true

9) When we transform a predicate to contain only one clause, is it the case that predicate coverage and CACC always remain the same? *1 point*

- Yes
- No

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

10)In order to apply logic based coverage criteria over finite state machines,the predicates that are needed come from which of the following entities? *1 point*

- From states of FSMs
- From the transitions of FSMs
- From the inputs of FSMs
- From the initial state of FSMs

No, the answer is incorrect.
Score: 0
Accepted Answers:
From the transitions of FSMs