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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » Software Testing (course)Course  
outlineAbout  
NPTEL ()How does an  
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## Week 0 ()

## Week 1 ()

- Lecture 1 -  
Motivation  
(unit?  
unit=17&lesso  
n=18)
- Lecture 2 -  
Terminologies  
(unit?  
unit=17&lesso  
n=19)
- Lecture 3 -  
Testing based  
on Models and  
Criteria (unit?  
unit=17&lesso  
n=20)

# Week 1 : Assignment 1

The due date for submitting this assignment has passed.

Due on 2024-08-07, 23:59 IST.

## Assignment submitted on 2024-08-03, 16:42 IST

1) An error was detected in a piece of code in the version that was ready for release, **1 point** just before the release. The error was successfully fixed by the concerned software developer who did not test if the entire software is working correctly with the fix. Which kind of testing did the developer fail to do?

- ☐ System testing.
- ☐ Integration testing.
- ☒ Regression testing.
- ☐ Functional testing.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*Regression testing.*

2) When is it that we say that a particular coverage criterion  $C_1$  **does not** subsume **1 point** another coverage criterion  $C_2$ ?

- ☒  $C_1$  does not subsume  $C_2$  when there is at least one test case that satisfies  $C_1$  that does not satisfy  $C_2$ .
- ☐  $C_1$  does not subsume  $C_2$  when there is at least one test case that satisfies  $C_2$  that does not satisfy  $C_1$

No, the answer is incorrect.

Lecture 4 -  
Automation -  
JUnit as an  
example (unit?  
unit=17&lesso  
n=21)

Week 1  
Feedback  
Form:  
Software  
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unit=17&lesso  
n=177)

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unit=17&lesso  
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Practice:  
Week 1:  
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name=200)

Quiz: Week 1  
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name=213)

Week 2 ()

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Week 12 ()

Score: 0

Accepted Answers:

$C_1$  does not subsume  $C_2$  when there is at least one test case that satisfies  $C_2$  that does not satisfy  $C_1$

3) Consider the statements regarding testing given below.

1 point

- Testing can be used to find **all** the errors in code.
- Testing can be used to show that a piece of software is fully correct.
- Testing can be used to find real errors in code.
- The purpose of testing is not to show correctness of software but to
- show errors.

Which of the following is true about the above-given statements?

- ☐ All the statements above are correct.
- ☐ The first and second statements are correct.
- ☐ The third and fourth statements are correct.
- ☒ Only the fourth statement is correct.

No, the answer is incorrect.

Score: 0

Accepted Answers:

The third and fourth statements are correct.

4) With reference to the various levels of testing, which level is the most mature and ideal for reducing errors in software and which level is the least mature and possibly leads to unknown faults being found after de- ployment? **1 point**

- ☒ Level 4 is the most mature and level 0 is the least mature level.
- ☐ All the levels are at equal risk, there is no notion of one level being more mature than the other.
- ☐ Level 0 is the most mature and level 4 is the least mature level.
- ☐ Level 4 is the most mature and level 1 is the least mature level, level 0 is of not much use for consideration.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Level 4 is the most mature and level 0 is the least mature level.

5) A particular software requirement specifies that a piece of software running on a cloud server needs to respond really fast even when thousands of users login simultaneously and request for services. Which kind of testing is done to check for such a requirement? **1 point**

- ☐ System testing.
- ☐ Stress testing.
- ☒ Performance testing.
- ☐ Functionality testing.

No, the answer is incorrect.

Score: 0

Accepted Answers:

Stress testing.

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6) Which of the following is a list of testing phases where both white-box and black-box techniques are applicable? **1 point**

- ☐ Unit testing only.
- ☐ Unit testing and integration testing only.
- ☒ Unit testing, integration testing and system testing.
- ☐ None of the above.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*Unit testing, integration testing and system testing.*

7) State true or false: There are certain phases in the software development and testing life-cycle where predominantly only black-box testing techniques are used. **1 point**

- ☒ True.
- ☐ False.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*True.*

8) What are the results of test case execution? **1 point**

- ☐ There is an explicit message that test case execution has caused an error in the program.
- ☐ There is an explicit message that there is no error from the test case.
- ☒ The test case has either passed or failed.
- ☐ The program produces an output that is the same as the expected output.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*The test case has either passed or failed.*

9) State true or false: Can JUnit be used to pass a collection of test cases for execution and collating the results? **1 point**

- ☒ True.
- ☐ False.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*True.*

10) What does the JUnit assertion `assertFalse(x1 <= x2)` return when `x1` is greater than `x2`? **1 point**

- ☒ True.
- ☐ False.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*True.*