**VUM – SW Metrics – exam 07/05/2021 Ticket Student**

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**Short questions:**

1. 'SW Failure',
2. 'purpose of metrics validation',
3. 'Process measures',
4. 'Tools for requirements management',
5. 'Design phases',
6. 'Defect Removal Efficiency',
7. 'Test Effectiveness Ratio',
8. "McCabe's Cyclomatic Complexity",
9. 'validation',
10. 'Mean Time To Change (MTTC)'

**Create a program with TDD and measure the coverage for the math-function:**

Power

**Create a Jenkins job to execute the code.**

**Provide the link to repository and screenshots from Jenkins console**

1.SW Failure - it’s what occurs when the user perceives that the software has stopped delivering the expected result as opposed to the specification input values.

2. The purpose of metrics validation is to characterize the agreement between predictions and observations by providing quantitative measures. A way to measure the degree to which a software process or system possesses some property.

3. Process measures - a way to measure whether or not an activity has been accomplished.

4.

5. Design phases - standard business practices for building a software application (SDLC - Software Development Life Cycle) - Planning, Design, Build, Document, Test, Deploy, Maintain. It’s a way to measure and improve the development process

6. Defect removal efficiency - it’s how many bugs were removed during testing, reviews and inspections and it’s something everyone in the business should understand as it’s a powerful software quality metric.

7. Test Effectiveness Ratio - it shows a percentage value of how many bugs were found by the testing team and the overall number of bugs found in the software.

8. McCabe's Cyclomatic Complexity - it’s a software metric used to indicate the complexity of a program. It measures the number of linearly independent paths through the program's source code

9. Validation - it’s how we check whether the software product is up to the mark (has high level requirements) / checks if what we are developing is the right product

10. MTTC - basically, it’s how long it takes for any new idea, feature, fix or any sort of change to get into the hands of the customer, in production, from the moment it was thought of.