**Dr. Onodueze**

**Software Engineering Final Exam**

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**Part A**

1. Your company has a software built in 1980, but it still works. A software engineer is proposing a new system. What should your company do? Who should make this decision? What factors should be considered in deciding what should be done? [There are 3 questions here]
2. How do we know that validation testing and defect testing are successful?
3. Why is there no separate acceptance testing in agile development?
4. Why is inspection a static process?
5. Why is IDE NOT NEEDED in target/prod environment and DATABASE NOT NEEDED in host/development environment?
6. Software gets to the point where its no longer profitable to improve. What stage is this?
7. Why is release testing a Blackbox testing technique? Explain.
8. What are the benefits of automating regression testing?
9. Name and explain (3) approaches/levels to reuse.
10. How can the below factors constitute risk in software project management?
11. Estimation
12. People
13. What is the full meaning of UML?
14. Differentiate functional and non-functional requirements.

**GIT Questions**

1. What is a repository in GIT?
2. What is the command you can use to write a commit message?
3. What are the advantages of using GIT?
4. What is the function of ‘GIT PUSH’ in GIT?
5. What is the function of git clone?
6. What is the purpose of branching in GIT?
7. What is the difference between the ‘git diff ’and ‘git status’?
8. What is ‘git add’ is used for?

**Part B (Hands-on)**

**GIT Configuration management**

1. PUSH this file to your GIT repo.
2. In the second step, add your name to this file locally, show the difference between the file you pushed earlier (origin) and the current file (checked out) with your name added. PUSH the file again and show the status of your repo.

You should submit a screenshot of your console/bash window.

**Selenium Website testing**

Go to Bing.com, search for “Software Engineering” and output the definition from Wikipedia to your console.

You should submit your code, output screen/console and the page that shows that the selenium driver had control of your browser.

