1. What are the four fundamental activities in software processes? (0.5 point)

    Software Specification,
    Software Development,
    Software Validation,
    Software Evolution

2. What's the main medium of communication in waterfall model? (0.5 point)
    A. Verification
    B. Documentation X
    C. Meetings
    D. Feedback and Reviews

3. Choose the software process models that are plan-driven. (0.5 point)
    A. Waterfall X
    B. Spiral X
    C. Prototyping X
    D. Incremental X
    E. Agile

4. Choose the software process models that are based on "growing software". (0.5 point)
    A. Waterfall
    B. Spiral
    C. Prototyping
    D. Incremental X
    E. Agile X

5. Name three important agile techniques that were introduced in extreme programming and explain what they are? (1.5 point)

    3 from:

    1. Requirements expressed as scenarios or user stories,

    Requirements are based on simple customer stories or scenarios that are used as a basis for deciding what functionality should be included in a system increment.

    2. Refactoring,

    Programming team look for possible software improvements and make these improvements even where there is no immediate need for them. This improves the understandability of the software and so reduces the need for documentation.

    3. Pair programming,

    Pair programming involves programmers working in pairs, developing code together.

    4. Test-first development.

    Writing tests before code clarifies the requirements to be implemented.

6. Select non-functional requirements from the list of requirements? (0.5 point)

   select: 2, 5, 6

1. There must be a "Preview" button along side "Launch" in "+Launch Stack" dialog box and the "Preview" button will be used to just preview the stack with the values populated to launch the stack.
2. The system should support for keystone as an authentication backend. This allows full integration with nova, swift, and other OpenStack services that share this common authentication method.
3. The system should support resetting image's status to modify the status recorded.
4. The system should have the capability to prevent deletion of objects. With this set for an object, normal delete commands would be rejected.
5. The system should support at least 100 nodes registered and the system should be able to select a number of nodes allocated to a given project.
6. Enterprises need to be compliant with data security laws and regulations that require sensitive data to be encrypted at rest (storage) as well in motion (over the wire).

7. Identify the issues in this requirement. (0.5 point)

   It is easy for the users to check their monthly expense because the system leverage Microsoft Excel to illustrate the expense form in an errorless manner.

   1. Easy-> vague
   2. Requirement on users
   3. No identifier on verb (check)
   4. Complex sentence (because)
   5. Microsoft Excel-> What vs How
   6. error less-> wishful thinking.

7. What is the main idea behind the DevOps approach? (0.5 point)

   Answering either one is fine:

   DevOps is the practice of operations and development engineers participating together in the entire service lifecycle, from design through the development process to production support.

   DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality.