# **Software Engineering / Spring 2018**

## **CS 310- Section 172**

### **Quiz 01 – 26 February 2018**

#### Q: 01- Define in your own words any 02 attributes of a good software? [2]

- Maintainability
  - Software should be written in such a way that it may evolve to meet the changing needs of
    customers. This is a critical attribute because software change is an unavoidable consequence of a
    changing business environment.
- Dependability
  - Software dependability has a range of characteristics, including reliability, security and safety. Dependable software should not cause physical or economic damage in the event of system failure
- Efficiency
  - Software should not make wasteful use of system resources such as memory and processor cycles. Efficiency therefore includes responsiveness, processing time, memory utilization, etc.
- Usability
  - Software must be usable, without undue effort, by the type of user for whom it is designed. This means that it should have an appropriate user interface and adequate documentation.

# Q: 02- Write 02 factors that you will keep in mind while selecting your team for the software development. [2]

- · Difficulty of the problem
- · Size of the resultant program
- Team lifetime
- Degree of Modularization
- The Required Quality
- · Rigidity of the delivery date
- · The Degree of Sociability

Q: 03- When and why you will select the following software process Models? [3+3]

<u>Process Model</u>	When to Use	When not to use
• Waterfall	<ul> <li>Well Planned Projects,</li> <li>Requirements are well defined</li> <li>Critical Project</li> <li>Long duration</li> </ul>	<ul> <li>Early delivery</li> <li>Less Planning</li> <li>Requirements changing frequently</li> </ul>
• Spiral	Minimization & Control of risk is required	<ul> <li>Requirements are well defined</li> <li>Known environment/problems</li> <li>Quick delivery required</li> </ul>
<ul> <li>Prototype</li> </ul>	<ul> <li>Requirements are unclear</li> <li>Customer is unable to specify requirements</li> <li>Useful for verification and validation</li> </ul>	<ul><li>Design strategy is decided.</li><li>Requirements are clear</li></ul>