Software Engineering CS-303 Section A

Roll # to your left: Your Roll #: **SOLUTION** Roll # to

your right:

Time Allowed: 20 minutes Quiz # 1 6th

September, 2018

1. [1] CMM stands for Capability Maturity Model

2. [2] The four basic product attributes are Maintainability [] Dependability [] Efficiency [] Usability

- 3. [1] Unit testing is performed by developers instead of testers.
- 4. [2] The user of a product you are developing wants his product to be of high quality. He wants the product to have certain quality factors, out of which he has listed efficiency and flexibility to be most important. What problem(s) do you foresee in fulfilling the user's demands (in terms of quality)?

 Efficiency and Flexibility are conflicting quality factors. It may be difficult to develop a system that is flexible as well as efficient, one may be achieved at the cost of the other.
- 5. [2] Managers of software projects often think that if they fall behind schedule, they can add more programmers late in the project to catch up and meet the deadline. What are your views about this approach?

 Adding programmers in the project makes it late, as it takes time for new programmers to understand the domain. Adding more resources, also impacts the budget in an adverse way.
- 6. [1] True or False? Software costs more to maintain than it does to develop. Note: In another version of the quiz, the answer is false.
- 7. [1] Arrange the following steps to form a basic/general Engineering Process Model.

i. Test ii. Design iii. Deploy iv. Specification v. Manufacture vi Maintain

Correct arrangement:

i. Specification ii. Design iii. Manufacture(Code) iv. Test v. Deploy

vi. Maintain

8. [5] List down the names of the first three levels of CMM? Explain what is done at level 2 and 3?

NOTE: In another version of the quiz, question was to list LAST three levels.

Level 1 - Initial

Level 2 – Repeatable: Basic project management processes are established to track cost, schedule, and functionality. The necessary project discipline is in place to repeat earlier successes on projects with similar applications.

Level 3 – Defined: The software process for both management and engineering activities is documented, standardized, and integrated into an organizational software process. All projects use a documented and approved version of the organization's process for developing and supporting software.

Level 4 – Managed: Detailed measures for software process and product quality are controlled. Both the software process and products are quantitatively understood and controlled using detailed measures. Level 5 – Optimizing: Continuous process improvement is enabled by qualitative feedback from the process and from testing innovative ideas and technologies.