Quiz # 01[A]

Course Title: Linear Control System (EE-321) Date: Feb. 05, 2020

Semester & Section: \_6th Course Teacher:\_Dr. Imran Khan\_\_\_\_\_\_

Total Marks: \_\_\_\_\_\_30\_\_\_\_\_\_\_\_\_\_\_\_\_ Time: \_\_\_\_\_\_25 Minutes\_\_\_\_\_\_\_\_\_\_\_\_\_

**Student Name**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Reg No**.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Instructions:**

1. Manage your answers in the provided space and be neat and precise.
2. Do any solutions and rough work on the blank side of this paper.
3. Execution of any forbidden actions during the exam will result in your quiz cancellation.
4. Choose only one option. Cutting not allowed.
5. Total time: 20 minutes.

**Q. No. 1.** State whether the following statements are true or false? Marks: 5. CLO: 01, PLO: 01

1. Closed-loop control system is always cheaper than open-loop control system. (**True / False**)
2. Transfer functions can be obtained even when initial conditions are nonzero (**True / False**)
3. Law for modeling translational motion of mechanical systems is (**True / False**)
4. The Laplace operator ℒ is not a linear operator (**True / False**)
5. for any value of . (**True / False**)

**Q. No. 2.** Investigate the solution , using Laplace Transform,

with initial conditions ? Marks: 10. CLO: 01, PLO: 01

**Q. No. 3.** Find the model which best represent the dynamics shown in the Figure below? Marks: 15. CLO: 01, PLO: 01

