

BRAC UNIVERSITY

Department of Computer Science and Engineering

Examination: Quiz 2

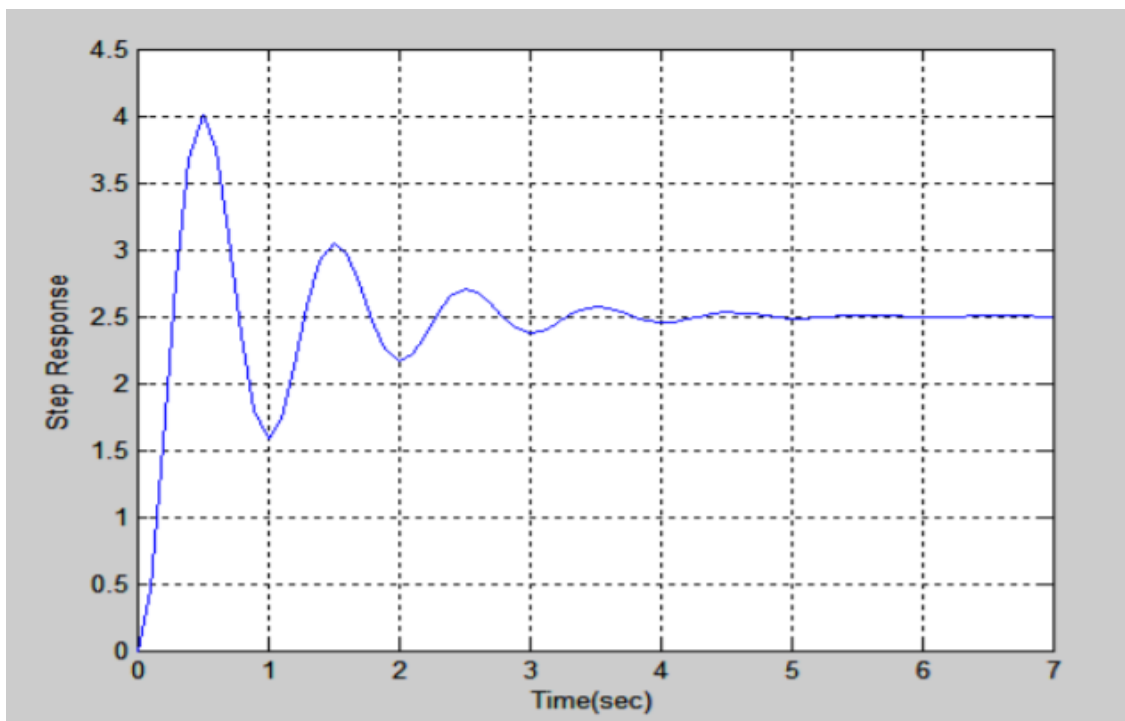
Semester : Fall 2023

Duration: 15 min

Full Marks: 5

CSE 461: Introduction to Robotics

You are working to develop a system where the desired value is 2.5 units and desired fluctuation is 4%. After a substantial amount of analysis, you found the following system response graph.



1.	CO2	a. Calculate the Overshoot, Rise Time and Settling time of the system response graph shown in the figure.	3
		b. Derive the Transfer Function of a PID Controller.	2

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Examination: Quiz 3

Semester : Fall 2023

Duration: 15 min

Full Marks: 5

CSE 461: Introduction to Robotics

1.	CO2	a. What path planning algorithm will you use if the robot only knows the distance to its goal, and the direction ? Describe briefly.	3
		b. What localization technique can be used when known landmarks are present in the environment ? Explain briefly.	2