

Name: **SOLUTION**

Reg. No: _____

Which type of controller increases the stability of the system by keeping it at a consistent setting?

- A. On-Off
- B. Proportional
- C. Integral
- D. Derivative**

Which type of controller increases the speed of response to reach the desired set point the fastest while eliminating offset?

- A. On-Off
- B. Proportional
- C. Integral
- D. Proportional-Integral**

Increasing derivative gain of a PID controller

- A. increases overshoot
- B. decreases overshoot**
- C. does not change overshoot
- D. increases overshoot in proportion to gain

The proportional part of a PID controller can be implemented using an opamp with

- A. non-inverting or inverting configuration**
- B. capacitor between the input signal and the opamp input
- C. capacitor in the feedback path
- D. open loop comparator configuration

In closed loop system the derivative control is used to

- A. decrease the overshoot and settling time**
- B. increase the overshoot and settling time
- C. decrease the overshoot and increase settling time
- D. increase the overshoot and decrease settling time

A PID controller improves

- A. steady state response
- B. transient response
- C. frequency response
- D. both steady state and transient response**

The derivative part of a PID controller can be implemented using an opamp with a

- A. capacitor between the input signal and the opamp input**
- B. capacitor in the feedback path
- C. non-inverting or inverting configuration
- D. capacitor at the output

The integrator part of a PID controller can be implemented using an opamp with a

- A. non-inverting or inverting configuration
- B. capacitor in the feedback path**
- C. capacitor between the input signal and the opamp input
- D. capacitor at the output path

The PID controller has three control operations in

- A. series
- B. parallel**
- C. P control in series and I, D in parallel
- D. P & I control in parallel and D control in series

What type of controller is displayed by the equation below?

- A. Feedforward
 - B. PID
 - C. On – Off Control
 - D. Proportional Integral**
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