1 Select the correct statement/s

proportional controller is an amplifier with adjustable gain
6%

derivative controller is as an amplifier with a "knob" that can be adjusted up or down.
3%

goal of derivative feedback is to improve closed-loop system stability
11%

1 and 2
3%

1 and 3 ✓

2 Derivative control is almost never used by itself, because:

it reduces the transient response
0%

it does not supply information on the desired end state ✓
14%

it tends to provide no response to noise
0%

1 and 2

2 and 3
39%

3 Goal of integral control is to

minimize the steady-state tracking error
12%

minimize steady-state output response to disturbances
13%

use as a reset control
0%

1 and 2

all of the above
35%

4 Select correct statement/s

Derivative action is used to speed the effect of the proportional action
19%

proportional action doesn't add a steady state error
2%

response of a second-order system to a unit step input isn't dependent on the damping
17%

1 and 2

none of the above
23%

5 Select correct statement/s

Proportional control of a first-order system gives a large error for low gain ✓

7%

infinite proportional gain causes system to respond as a unity feedback

18%

high proportional gain increase the time constant

14%

all of the above

none of the above

13%