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Started on	Wednesday, 10 April 2019, 9:26 AM
State	Finished
Completed on	Wednesday, 10 April 2019, 10:10 AM
Time taken	43 mins 31 secs
Grade	**100.00** out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00

Q8c

Given $H(s) = \dfrac{(45,000)(s+200)}{(s+2,000)(s+9,000)}$

a) What is the zero of this function in the form $s + z_1$?

$z_1 =$ [200] ✓

b) What are the two poles of this function in the form $s + p_{1,2}$?

$p_1 =$ [2000] ✓ (positive lower value)

$p_2 =$ [9000] ✓ (positive higher value)

c) What is the *gain K* in dB after putting this function in *Standard Form*?

$K =$ [-6.02] ✓ dB

For the following use the Bode diagram <u>straight-line approximation conventions</u> (do not plot the function)

d) Find the magnitude of this transfer function at $\omega = 2,000$ rad/sec.

$| H(j\omega = 2,000 \text{ rad/sec}) | =$ [13.87] ✓ dB

e) Find the phase angle at $\omega = 2,000$ rad/sec

$\theta(j\omega = 2,000 \text{ rad/sec}) =$ [45] ✓ ° (Degrees)

Correct

Marks for this submission: 100.00/100.00.

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