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State Finished

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Time taken 20 mins 34 secs

Grade 100.00 out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00

Q8a

Given
$$H(s) = \frac{27,000s}{(s+300)(s+9,000)}$$

a) What is the zero of this function?

$z_1 =$ ✓

b) What are the two poles of this function?

$p_1 =$ ✓ (positive lower value)

$p_2 =$ ✓ (positive higher value)

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

$K =$ ✓ dB

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

d) Find the magnitude of this transfer function at $\omega = 100$ rad/sec.

$|H(j\omega = 100 \text{ rad/sec})| =$ ✓ dB

e) Find the phase angle at $\omega = 300$ rad/sec

$\theta(j\omega = 300 \text{ rad/sec}) =$ ✓ ° (Degrees)

Correct

Marks for this submission: 100.00/100.00.

