Started on	Wednesday, 10 April 2019, 2:07 PM
State	Finished
Completed on	Wednesday, 10 April 2019, 2:18 PM
Time taken	10 mins 39 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 = 0 ✓

b) What are the two poles of this function?

p_1 = 300 ✓ (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 = -40 ✓ 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 ω = 100 rad/sec.

| H(jω = 100 rad/sec) | = -0.04583 ✓ dB

e) Find the phase angle at ω = 300 rad/sec

θ(jω = 300 rad/sec) = 45 ✓ ° (Degrees)

a) z_1 = 0

b) p_1 = 300 p_2 = 9,000

c) K in dB = -40 dB

d) | H(jω = 100 rad/sec) | = 0 dB

e) θ(jω = 300 rad/sec) | = 45°

Correct

Marks for this submission: 100.00/100.00.