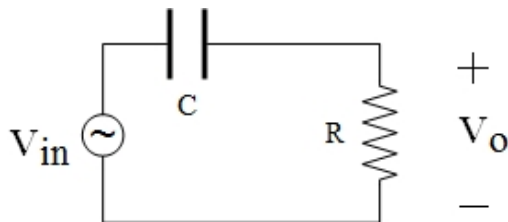|	
Started on	Wednesday, 19 April 2017, 11:08 AM
State	Finished
Completed on	Wednesday, 19 April 2017, 11:56 AM
Time taken	47 mins 49 secs
Grade	**100.00** out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00

Quiz 9d

Given: C = 12 nF (nano F)   R = 125 kΩ (kilo Ohm)

a) Find the cutoff frequency f_c for this high-pass filter.

f_c = [106.1] ✔ Hz

b) Find the H(jω) for H(jω = 0.2ω_c).

H(jω = 0.2 ω_c) = [0.196] ✔ at angle [78.69] ✔ ° (Degrees)

c) Find the H(jω) for H(jω = ω_c).

H(jω = ω_c) = [0.707] ✔ at angle [45] ✔ ° (Degrees)

d) Find the H(jω) for H(jω = 5 ω_c).

H(jω = 5 ω_c) = [0.98] ✔ at angle [11.31] ✔ ° (Degrees)

Numeric Answer

a) f_c = 106.1033 Hz

b) H(jw = 0.2w_c) = 0.1961 at angle 78.69°

c) H(jw = w_c) = 0.7071 at angle 45°

d) H(jw = 5w_c) = 0.9806 at angle 11.31°

Correct

Marks for this submission: 100.00/100.00.