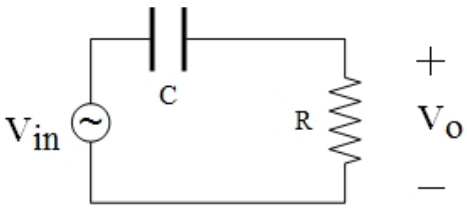
Started on	Wednesday, 19 April 2017, 5:22 PM
State	Finished
Completed on	Wednesday, 19 April 2017, 6:30 PM
Time taken	1 hour 7 mins
Overdue	7 mins 16 secs
Grade	**100.00** out of 100.00

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) = .196 ✓

at angle 78.7 ✓ ° (Degrees)

c) Find the H(jω) for H(jω = ω_c).

H(jω = ω_c) = .707 ✓

at angle 45 ✓ ° (Degrees)

d) Find the H(jω) for H(jω = 5 ω_c).

H(jω = 5 ω_c) = .98 ✓

at angle 11.31 ✓ ° (Degrees)

Numeric Answer

a) f_c = 106.1033 Hz

b) H(jω = 0.2ω_c) = 0.1961 at angle 78.69°

c) H(jω = ω_c) = 0.7071 at angle 45°

d) H(jω = 5ω_c) = 0.9806 at angle 11.31°

Correct

Marks for this submission: 100.00/100.00.