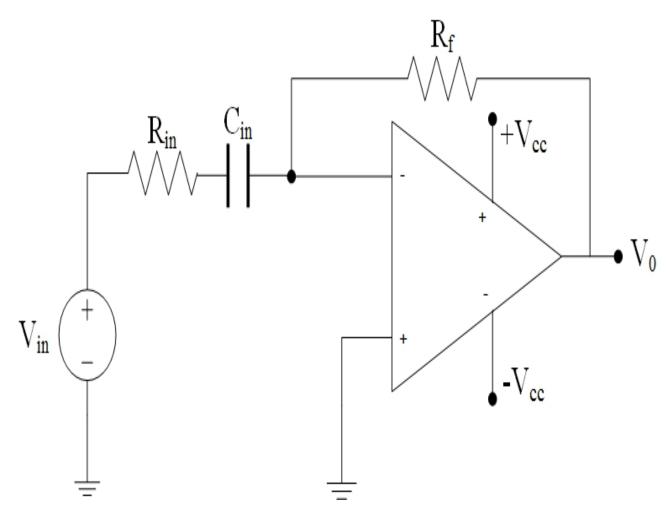
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Started on	Wednesday, 6 February 2019, 9:18 AM
State	Finished
Completed on	Wednesday, 6 February 2019, 9:55 AM
Time taken	37 mins 12 secs
Grade	100.00 out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00



Quiz 2d

The operational amplifier is ideal.

Given: R_{in} = 10 k Ω (kilo Ohm) C_{in} = 0.1 mF (micro F) R_f = 14 k Ω (kilo Ohm)

$$+V_{cc} = 15 \text{ V}$$
 $-V_{cc} = -15 \text{ V}$

For each question below, report your answer in the form of real + j imaginary

a) Find the steady-state phasor output V_0 when $V_{in}(t) = 5 \text{ V}$

$$\mathbf{V_0} = \begin{bmatrix} 0 \\ \end{bmatrix} + \mathbf{j} \begin{bmatrix} 0 \\ \end{bmatrix}$$
 Volts

b) Find the steady-state phase output V_0 when $V_{in}(t) = 5 \cos(500t)V$.

$$V_0 = \begin{bmatrix} -1.4 \\ \end{bmatrix} + j \begin{bmatrix} -2.8 \\ \end{bmatrix}$$
 Volts

c) Find the magnitude of the steady-state phase output $\mathbf{V_0}$ when $V_{in}(t) = 5 \cos(5,000t)V$.

$$V_0 = \begin{bmatrix} -6.73 \\ \hline{} & + j \\ \hline{} & -1.35 \\ \hline{} & Volts$$

Correct

Marks for this submission: 100.00/100.00.

■ Quiz 1 - Chapter 9

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