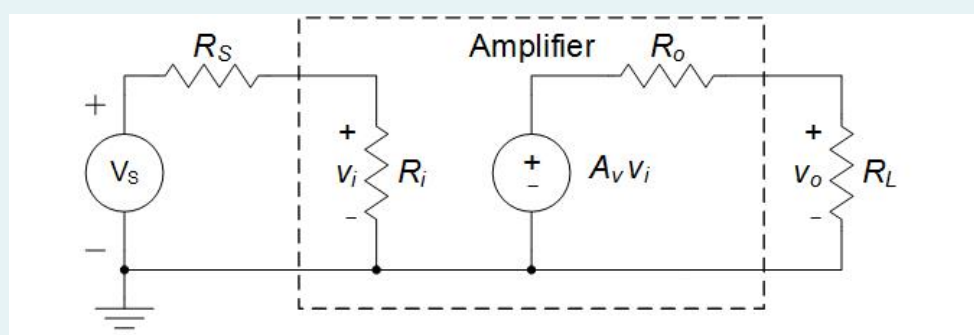


Started on	Monday, 18 July 2022, 10:59 PM
State	Finished
Completed on	Monday, 18 July 2022, 11:40 PM
Time taken	41 mins 8 secs
Grade	8.0 out of 10.0 (80%)

Question 1

Correct

Mark 2.0 out of 2.0



For the amplifier shown, what is the largest output resistance in $k\Omega$ that can be used without losing more than 32.7 percent of the amplifier's open circuit output voltage = $A_v v_i$ across R_o ? Use $R_L = 31.3k\Omega$.

Answer: ✓

The correct answer is: 15.21

Correct

Marks for this submission: 2.0/2.0.

Question **2**

Correct

Mark 2.0 out of 2.0

An amplifier which needs a low input resistance and a low output resistance is :

Select one:

- ☐ a. A current amplifier
- ☐ b. None of these
- ☐ c. A transconductance amplifier
- ☒ d. A transresistance amplifier
- ☐ e. A voltage amplifier



The correct answer is: A transresistance amplifier

Correct

Marks for this submission: 2.0/2.0.

Question **3**

Correct

Mark 0.0 out of 2.0

For a DC coupled amplifier with a single high frequency pole, the magnitude of the gain decreases at -20dB/decade as the frequency is increased above the corner frequency.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

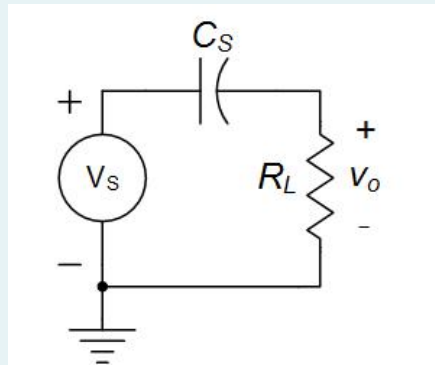
Correct

Marks for this submission: 2.0/2.0. Accounting for previous tries, this gives **0.0/2.0**.

Question 4

Correct

Mark 2.0 out of 2.0



The circuit shown has a :

Select one:

- ☐ a. Bandpass response
- ☒ b. High pass response
- ☐ c. Low pass response
- ☐ d. Impossible to determine
- ☐ e. None of these



The correct answer is: High pass response

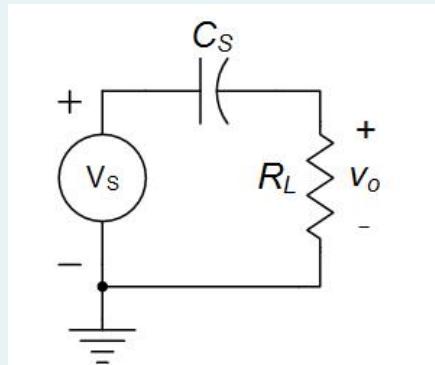
Correct

Marks for this submission: 2.0/2.0.

Question 5

Correct

Mark 2.0 out of 2.0



For the filter circuit shown, what is the magnitude of the transfer function V_o/V_s at a frequency of 15.9MHz? Use $R_L = 6.3\text{k}\Omega$ and $C_s = 7.4\text{pF}$.

Answer: ✓

The correct answer is: 0.978

Correct

Marks for this submission: 2.0/2.0.

[◀ Practice Quiz 1a - Circuit Basics](#)

[Practice Quiz 2 - Opamps ▶](#)