Started on	Thursday, 14 September 2017, 4:43 PM
State	Finished
Completed on	Thursday, 14 September 2017, 10:43 PM
Time taken	5 hours 59 mins
Grade	**10.0** out of 10.0 (**100**%)

Question 1

Correct

Mark 2.0 out of 2.0

What is the power dissipation in milliwatts for an amplifier which delivers a sinusoidal output voltage of 3.4 Vpeak to a 0.8kΩ load while drawing a current of 11.1mA from two power supplies of VCC = +10V and VEE = -10V ? Neglect any power drawn from the input signal source.

Answer: 214.78

The correct answer is: 214.78

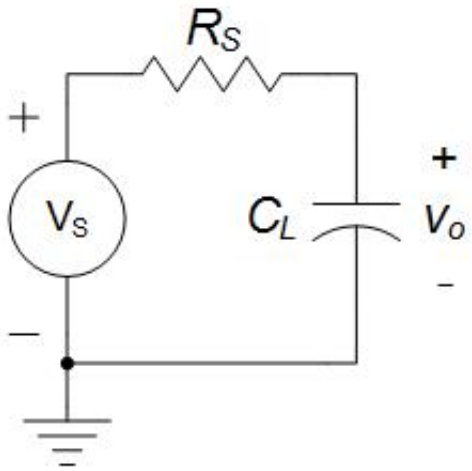
Correct

Marks for this submission: 2.0/2.0.

Question 2

Correct

Mark 2.0 out of 2.0



For the filter circuit shown, what is the pole frequency in MHz for the transfer function Vo/Vs ? Use Rs = 4.5kΩ and CL = 2.8pF.

Answer: 12.63

The correct answer is: 12.63

Correct

Marks for this submission: 2.0/2.0.

Question 3

Correct

Mark 2.0 out of 2.0

For an amplifier with a single high frequency pole, which of the following is true?

Select one:

- a. At this pole frequency, the phase of the gain will be +45 degrees above the midband value
- b. Above this pole frequency, the magnitude of the gain will roll off at -20dB/decade as frequency increases ✓
- c. None of these
- d. Above this pole frequency, the phase of the gain will increase at +45 degrees/decade as frequency increases
- e. At this pole frequency, the magnitude of the gain will be +3dB above the midband value

The correct answer is: Above this pole frequency, the magnitude of the gain will roll off at -20dB/decade as frequency increases

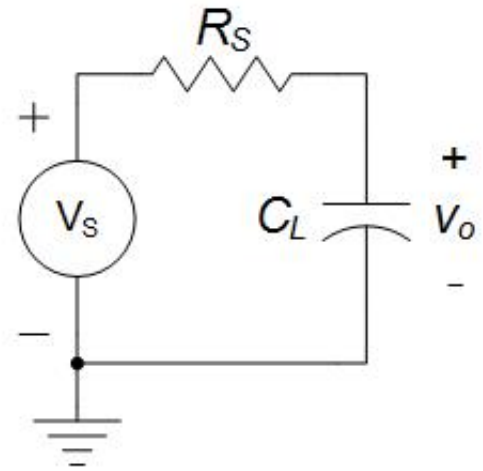
Correct

Marks for this submission: 2.0/2.0.

Question 4

Correct

Mark 2.0 out of 2.0



The circuit shown has a :

Select one:

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

The correct answer is: Low pass response

Correct

Marks for this submission: 2.0/2.0.

Question 5

Correct

Mark 2.0 out of 2.0

For an amplifier with a single-time constant high pass response, the magnitude of the gain decreases at -6dB/octave as the frequency is decreased below the corner frequency.

Select one:

- True ✓
- False

The correct answer is 'True'.

Correct

Marks for this submission: 2.0/2.0.