RC Circuits Online Test – Multiple Choice Questions and Answers

Congratulations – you have completed **RC Circuits Online Test Set 1**.

You scored **2** points out of **10** points total.

Your answers are shown below:

1. Which statement about a series RC circuit is true?

- The capacitor's voltage drop is in phase with the resistor's voltage drop
- The current leads the source voltage
- The resistor voltage lags the current
- **The current lags the source voltage**

2. When the frequency of the source voltage decreases, the impedance of a parallel RC circuit

- **decreases to zero**
- increases
- does not change
- decreases

3. What is the effect of increasing the resistance in a series RC circuit?

- The current will increase
- **There will be no effect at all**
- The input voltage will increase
- The phase shift will decrease

4. Power that is measured in volt-amperes is called

- true power
- **impedance power**
- reactive power
- apparent power

5. What is the angular difference between +j4 and –j4?

- 30°
- 90°
- **180°**
- 270°

6. In the complex plane, the number 14 – j5 is located in the

- **third quadrant**
- first quadrant
- fourth quadrant
- second quadrant

7. In a 20 Vac series RC circuit, if 20 V is read across the resistor and 40 V is measured across the capacitor, the applied voltage is

- **45 Vac**
- 50 Vac
- 60 Vac
- 65 Vac

8. For a certain load, the true power is 150 W and the reactive power is 125 VAR. The apparent power is

- 19.52 W
- 195.2 W
- **275 W**
- 25 W

9. In a series RC circuit, 12 V(rms) is measured across the resistor and 15 V(rms) is measured across the capacitor. The rms source voltage is

- **1.9 V**
- 19.2 V
- 27 V
- 3 V

10. The voltages in Problem 4 are measured at a certain frequency. To make the capacitor voltage greater than the resistor voltage, the frequency

- must be decreased
- has no effect
- **must be increased**
- is held constant

ONE THOUGHT ON “RC CIRCUITS ONLINE TEST – MULTIPLE CHOICE QUESTIONS AND ANSWERS”

chiku roy

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Online test is very good

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