

There is more to practice on **ElectroMath in module 3**
Module 3 various subjects Answers are below!

A series AC circuit consisting of an inductor, resistor and a capacitor is connected across an alternating supply. Which of the following statements is true?

- a) The voltage across the resistor leads the voltage across the capacitor by 90dgr.
- b) The supply voltage leads the circuit current by a given phase angle.
- c) The voltage across the capacitor lags the supply voltage by 90dgr.

The method most often used in overcoming the effect of armature reaction is through the use of

- a) interpoles
- b) connected series field
- c) shaded poles

In the simple d.c. motor if the loop of wire is free to rotate it will do so in

- a) An anticlockwise direction
- b) Whichever direction it is given an initial start
- c) A clockwise direction.

The poles of a d.c generator are laminated to

- a) A reduce hysteresis losses
- b) Reduce flux losses
- c) Reduce eddy current losses

In a DC motor the voltage induced in the windings as its armature rotates is called

- a) Induced current
- b) Induced EMF
- c) Counter EMF

In an AC circuit, the nearer the phase angle between the applied voltage and current is to 0dgr, the

- a) Power factor approaches unity
- b) Apparent power is almost equal to the reactive power.
- c) True power is almost equal to the reactive power.

A capacitor has Brown, Black and Orange bands. Its value is

- a) 10 picofarads
- b) 10 nanofarads
- c) 100 picofarads

A 300 ohm resistor would have a colour code of

- a) Orange , Orange, Brown
- b) Orange , Brown, Black
- c) Orange , Black, Brown

ANSWERS:

1c 2a 3b 4c 5c 6a 7b 8b

Electrical Engineering Calculators!

www.discovercircuits.com

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Normally ELI the ICE man , but remember in a series circuit the current is the same in all parts of the circuit!

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Armature reaction Info on NEETS!

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Eddy Current Info on Wikipedia

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Electric Motor Info on Wikipedia

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Cosine of 0 = 1

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Colour Code Info on Wikipedia

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Resistor calculator

Resistor and Capacitor Colour Code Calculator