Started on	Monday, 4 March 2024, 7:17 PM
State	Finished
Completed on	Monday, 4 March 2024, 7:17 PM
Time taken	14 secs
Marks	0.00/20.00
Grade	**0.00** out of 10.00 (**0**%)

Question **1**

Not answered

Marked out of 1.00

1. The value of AC voltage shown on the name plate of an appliance is the:

a. (d) r.m.s. value

b. (a) average value

c. (b) peak value

d. (c) instantaneous value

Your answer is incorrect.

The correct answer is:
(d) r.m.s. value

Question **2**

Not answered

Marked out of 1.00

1. The value of AC voltage that has the same heating effect as the equivalent value of DC voltage is the:

a. (a) rms value.

b. (d) peak to peak value.

c. (b) peak value.

d. (c) average value.

Your answer is incorrect.

The correct answer is:
(a) rms value.

Question **3**

Not answered

Marked out of 1.00

1. For one complete cycle of an AC supply, the current flow:

a. (c) will flow in one direction then reverses direction.

b. (d) reaches a maximum in one direction then falls to zero.

c. (a) will remain constant in magnitude.

d. (b) will flow in one direction only.

Your answer is incorrect.

The correct answer is:
(c) will flow in one direction then reverses direction.

Question **4**

Not answered

Marked out of 1.00

1. The standard unit of frequency is the:

a. (c) period (T)

b. (a) Hertz (Hz)

c. (d) cycle per second (CPS)

d. (b) Volt (V)

Your answer is incorrect.

The correct answer is:
(a) Hertz (Hz)

Question **5**

Not answered

Marked out of 1.00

1. A sinusoidal wave has a maximum value of 340 volts. Determine the instantaneous value of voltage at angles of:

(a) 45^0

(A sinusoidal wave has a frequency of 400 Hz.. Determine the period for this frequency.

a. (120V) (5mS)

b. (240V) (2.5mS)

c. (200V) (3mS)

Your answer is incorrect.

The correct answer is:
(240V) (2.5mS)

Question **6**

Not answered

Marked out of 1.00

1. When measuring the phase difference with a CRO., the CRO.

a. (a) must be able to show two waveforms.

b. (c) time base must be re-calibrated.

c. (d) must be set to DC input.

d. (b) needs to have a high sensitivity.

Your answer is incorrect.

The correct answer is:
(a) must be able to show two waveforms.

Question **7**

Not answered

Marked out of 1.00

Phasors are quantities which vary in:

a. (b) magnitude and direction only

b. (c) magnitude, direction and time

c. (a) magnitude and time only

d. (d)

(a) direction only

(d) direction only

Your answer is incorrect.

The correct answer is:
(b) magnitude and direction only

Question **8**

Not answered

Marked out of 1.00

Two sinusoidal waves with a frequency of 50 Hz are displayed on a CRO. If the horizontal displacement between the waveforms is measured to be 3.5mS, determine the phase angle between the two waveshapes

a. 30 degree

b. 90 degree

c. 63 degree

d. 45 degree

Your answer is incorrect.

The correct answer is:
63 degree

Question **9**

Not answered

Marked out of 1.00

1. The resultant of two or more voltages differing in phase angle may be determined by:

a. (d) numerical addition

b. (b) averaging the voltage values

c. (c) phasor addition

d. (a) algebraic addition

Your answer is incorrect.

The correct answer is:
(c) phasor addition

Question **10**

Not answered

Marked out of 1.00

240 volt, 50Hz single phase motor draws 18A from the supply at a lagging phase angle of 400. A capacitor connected across the motor draws 7A at a leading phase angle of 90^0. , determine the current drawn from the supply

a. 25A

b. 14.5A

c. 20A

d. 10A

Your answer is incorrect.

The correct answer is:
14.5A

Question **11**

Not answered

Marked out of 1.00

1. The opposition to current flow in a purely capacitive circuit is known as_____and is measured in _____

a. (b) resistance, ohms

b. (c) capacitive reactance, farads

c. (d) impedance, farads

d. (a) capacitive reactance, ohms

Your answer is incorrect.

The correct answer is:
(a) capacitive reactance, ohms

Question **12**

Not answered

Marked out of 1.00

The phase angle (f) between voltage and current in a purely capacitive circuit is:

a. (a) 180 electrical degrees.

b. 1.
(d) 0 electrical degrees.The phase angle (f) between voltage and current in a purely capacitive circuit is:

(c) 45 electrical degrees.

(c) 0 electrical degree

c. (b) 90 electrical degrees.

Your answer is incorrect.

The correct answer is:
(b) 90 electrical degrees.

Question **13**

Not answered

Marked out of 1.00

Adding extra capacitance to a purely capacitive circuit will cause the phase angle (f) between voltage and current to:

a. (b) decrease.

b. (d) become maximum.

c. (a) increase.

d. (c) remain unchanged.

Your answer is incorrect.

The correct answer is:
(a) increase.

Question **14**

Not answered

Marked out of 1.00

Determine the current taken by a 390mF capacitor when connected to a 240V, 50Hz supply.

a. (39.4A)

b. (29.4A)

c. (49.4A)

Your answer is incorrect.

The correct answer is:
(29.4A)

Question **15**

Not answered

Marked out of 1.00

In a parallel resonant circuit, circuit impedance is a_____, and circuit current is a_____.

a. (b) minimum, minimum

b. (d) minimum, maximum

c. (a) maximum, maximum

d. (c) maximum, minimum

Your answer is incorrect.

The correct answer is:
(c) maximum, minimum

Question **16**

Not answered

Marked out of 1.00

1. Adding extra capacitance to a leading R.L.C. parallel circuit will cause the phase angle (f) between voltage and current to:

a. (c) become maximum.

b. (b) increase.

c. (a) remain unchanged.

d. (d) decrease.

Your answer is incorrect.

The correct answer is:
(b) increase.

Question **17**

Not answered

Marked out of 1.00

In a parallel L.C. circuit, the component with the largest_____will determine the phase angle for the circuit.

a. (b) voltage

b. (d) resistance

c. (a) current

d. (c) reactance

Your answer is incorrect.

The correct answer is:
(c) reactance

Question **18**

Not answered

Marked out of 1.00

1. An L.C. parallel circuit is connected to a single phase 240V, 50Hz supply. If the current through the capacitor 12A, and the current through the inductor is 16A at a phase angle of 60^0 lagging, determine the:

(a) impedance of the inductor;

(b) resistance of the inductor;

(c) impedance of the capacitor;

(d) current drawn from the supply;)

(e) circuit impedance;

a. (25 ohm) (8**.5 ohm**) (20 ohm) (8.2A) (30**.3 ohm**)

b. (35 ohm) (17**.5 ohm**) (50 ohm) (8.2A) (29**.3 ohm**)

c. (15 ohm) (7**.5 ohm**) (20 ohm) (8.2A) (29**.3 ohm**)

Your answer is incorrect.

The correct answer is:
(15 ohm) (7**.5 ohm**) (20 ohm) (8.2A) (29**.3 ohm**)

Question **19**

Not answered

Marked out of 1.00

An 80 ohm resistor connected in parallel with a 33mF capacitor is connected to a 250V, 50Hz supply. Determine by phasor diagram the current drawn from the supply and the circuit phase angle using a scale of 1mm = 0.05A.

a. 6 A, 20 degree

b. 4A, 40 Degree

c. 2A 40 Degree

Your answer is incorrect.

The correct answer is:
4A, 40 Degree

Question **20**

Not answered

Marked out of 1.00

1. The opposition to current flow in any ac circuit containing_____and reactive components is known as_____and is measured in ohms.

a. (c) resistive, impedance

b. (a) capacitive , reactance

c. (d) inductive, impedance

d. (b) inductive reactance

Your answer is incorrect.

The correct answer is:
(c) resistive, impedance

◄ Week 2 Quiz

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