| | |
|---|---|
| **Started on** | Wednesday, 5 January 2022, 9:11 AM |
| **State** | Finished |
| **Completed on** | Wednesday, 5 January 2022, 10:00 AM |
| **Time taken** | 48 mins 25 secs |
| **Grade** | **19.00** out of 20.00 (**95**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

Condition for ideal current source is.

a. Internal resistance of the source is 1 ohm.

b. Internal resistance of the source is 100 ohm.

c. Internal resistance of the source is zero ohm.

d. Internal resistance of the source is infinite ohm. ✔

Your answer is correct.

The correct answer is:
Internal resistance of the source is infinite ohm.

Question **2**

Correct

Mark 1.00 out of 1.00

The internal resistance of a practical current source is.

- a. Connected in series parallel.
- b. Connected in parallel. ✔
- c. Connected in series.
- d. None of these.

Your answer is correct.

The correct answer is:
Connected in parallel.

Question **3**

Correct

Mark 1.00 out of 1.00

The internal resistance of a practical voltage source is.

- a. Connected in parallel.
- b. Connected in series. ✔
- c. Connected in series parallel.
- d. None of these.

Your answer is correct.

The correct answer is:
Connected in series.

Question **4**

Not answered

Marked out of 1.00

Find the current through 20 Ohm resistance by using superposition theorem.

a. +2 Amp

b. +4 Amp

c. 0.714 Amp

d. -4 Amp

Your answer is incorrect.

The correct answer is:
0.714 Amp

Question **5**

Correct

Mark 1.00 out of 1.00

An A.C. current is given by i = 200 sin100t. It will achieve a value of 1oo amperes after _____ second?.

- a. (1/1200).
- b. (1/300).
- c. (1/900).
- d. (1/600). ✔

Your answer is correct.

The correct answer is:
(1/600).

Question **6**

Correct

Mark 1.00 out of 1.00

The instantaneous equation of Voltage is given by V= 210 Sin (314t – 10). Calculate the supply frequency.

- a. 30 Hz.
- b. 50 Hz. ✔
- c. 130 Hz.
- d. 60 Hz.

Your answer is correct.

The correct answer is:
50 Hz.

Question **7**

Correct

Mark 1.00 out of 1.00

The alternating supply voltage, V = 10 Sin (wt+10) is applied to a resistance of 5 ohm. What will be the RMS value of Voltage & Current?.

a. 7.07 Volt and 7.07 Amp respectively.

b. 7.07 Volt and 1.414 Amp respectively. ✔

c. 1.414 Volt and 7.07 Amp respectively.

d. 1.414 Volt and 1.414 Amp respectively

Your answer is correct.

The correct answer is:
7.07 Volt and 1.414 Amp respectively.

Question **8**

Correct

Mark 1.00 out of 1.00

The alternating supply voltage, V = 10 Sin (wt+10) is applied to a resistance of 2 ohm. What will be the phase difference between current & voltage wave?.

- a. 0 ✔
- b. 90
- c. 30
- d. 120

Your answer is correct.

The correct answer is:
0

Question **9**

Correct

Mark 1.00 out of 1.00

How the inductor and Capacitor behave, when Supply DC is provided to them?.

- a. Inductor behave as open circuit and Capacitor behave as short circuit.
- b. Inductor behave as short circuit and Capacitor behave as open circuit. ✔
- c. Both Inductor and Capacitor behave as short circuit.
- d. Both Inductor and Capacitor behave as open circuit.

Your answer is correct.

The correct answer is:
Inductor behave as short circuit and Capacitor behave as open circuit.

Question **10**

Correct

Mark 1.00 out of 1.00

What is power factor?.

- a. Power Factor is the ratio of Real power to Reactive Power.
- b. Power Factor is the ratio of Apparent Power to Real.
- c. Power Factor is the ratio of Reactive power to Real Power.
- d. Power Factor is the ratio of Real power to Apparent Power. ✔

Your answer is correct.

The correct answer is:
Power Factor is the ratio of Real power to Apparent Power.

Question **11**

Correct

Mark 1.00 out of 1.00

During the measurement of Power and Current across a coil, the wattmeter indicate the value of 550 Watt and Ammeter indicate the value of 5 Amp. When a multimeter is connected across supply, it indicate 220 V, 50 Hz.
Calculate the value of Resistance of coil.

- a. 22 ohm ✔
- b. 11 ohm
- c. None of these
- d. 44 ohm

Your answer is correct.

The correct answer is:
22 ohm

Question **12**

Correct

Mark 1.00 out of 1.00

Select the correct statement.

- a. A voltage source connected in shunt with resistance (R ohm) can be converted into its equivalent current source in series with that same resistance (R ohm).
- b. A current source connected in series with resistance (R ohm) can be converted into its equivalent voltage source in series with that same resistance (R ohm).
- c. A current source connected in shunt with resistance (R ohm) can be converted into its equivalent voltage source in series with that same resistance (R ohm). ✔
- d. A current source connected in shunt with resistance (R ohm) can be converted into its equivalent voltage source in shunt with that same resistance (R ohm).

Your answer is correct.

The correct answer is:
A current source connected in shunt with resistance (R ohm) can be converted into its equivalent voltage source in series with that same resistance (R ohm).

Question **13**

Correct

Mark 1.00 out of 1.00

The voltage equation of alternating supply is given by: V = 200 Sin (wt + 10). Calculate the Form factor and Peak factor of the voltage.

- a. 127.32 and 141.42 respectively.
- b. 141.42 and 127.32 respectively.
- c. 1.111 and 1.414 respectively. ✔
- d. 1.414 and 1.111 respectively.

Your answer is correct.

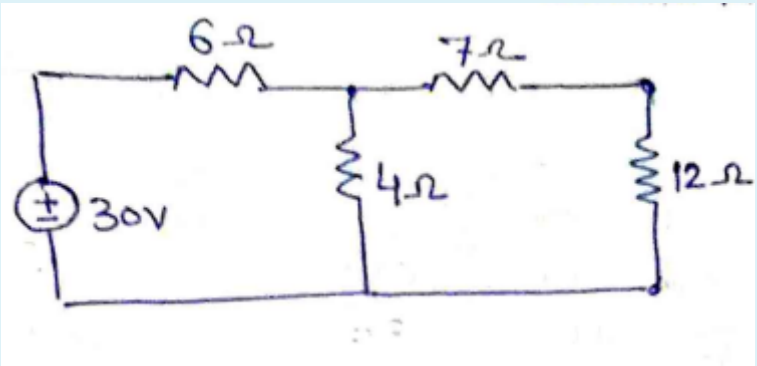
The correct answer is:
1.111 and 1.414 respectively.

Question **14**

Correct

Mark 1.00 out of 1.00

Calculate Thevenin's equivalent voltage for the load resistance 12 ohm.




a. + 3.33 Volt

b. 12 Volt ✔

c. -3.33 Volt

d. +8.33 Volt

Your answer is correct.

The correct answer is:
12 Volt

Question **15**

Correct

Mark 1.00 out of 1.00

The alternating supply voltage, V = 10 Sin (wt+10) is applied to a resistance of 2 ohm. What will be the equation of current flowing through resistance?.

a. I = 5 Cos (wt+10).

b. I = 5 Sin (wt+10). ✔

c. I = 5 Sin (wt+110).

d. I = 5 Sin (wt-80).

Your answer is correct.

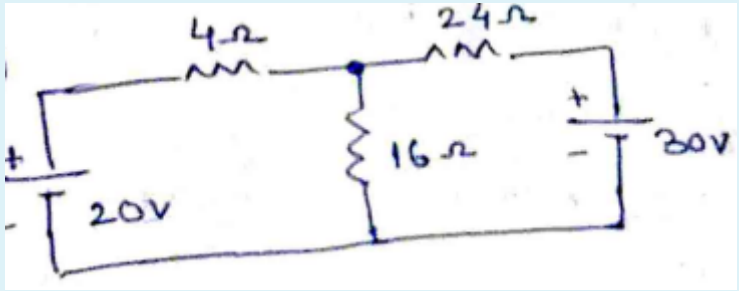
The correct answer is:
I = 5 Sin (wt+10).

Question **16**

Correct

Mark 1.00 out of 1.00

What will be the thevenin's equivalent resistance for the load resistance of 16 ohm.




- a. 3.43 ohm ✔
- b. 33 ohm
- c. 333 ohm
- d. 28 ohm

Your answer is correct.

The correct answer is:
3.43 ohm

Question **17**

Correct

Mark 1.00 out of 1.00

Select the correct examples of Active elements.

- a. Resistor, Inductor and Capacitor.
- b. Voltage Source, Resistor, Inductor and Capacitor.
- c. Current Source, Resistor, Inductor and Capacitor.
- d. Voltage Source and Current Source. ✔

Your answer is correct.

The correct answer is:
Voltage Source and Current Source.

Question **18**

Correct

Mark 1.00 out of 1.00

Two impedances Z1 = (6 + j 9) ohm  Z2 = (6-j15) ohm, are connected in series. if the supply voltage of 220$\angle$0 is applied to this combination, calculate the supply current.

- a. None of These
- b. (14.67 + 7.33 J) Amp ✔
- c. (4.67 + 7.33 J) Amp
- d. (14.67 + 8.33 J) Amp

Your answer is correct.

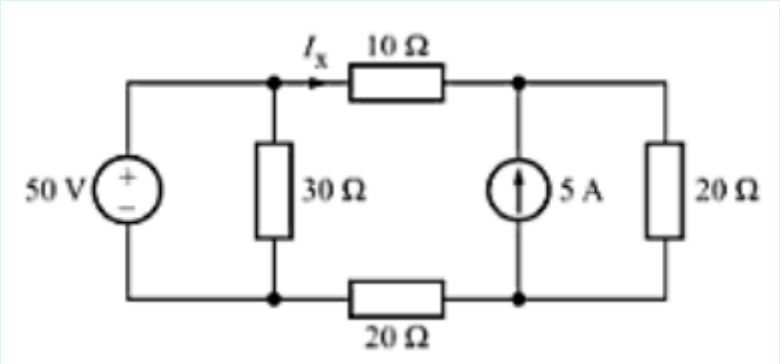
The correct answer is:
(14.67 + 7.33 J) Amp

Question **19**

Correct

Mark 1.00 out of 1.00

Determine the current Ix across 10 ohm resistance.




- a. None of These
- b. -1 Amp ✔
- c. -2 Amp
- d. -3 Amp

Your answer is correct.

The correct answer is:
-1 Amp

Question **20**

Correct

Mark 1.00 out of 1.00

Which of the following is correct for the case of superposition theorem?.

a. The non-operating current source is considered as short circuit and the non-operating voltage source is considered as open circuit.

b. Both the non-operating current and voltage source are considered as open circuit.

c. The non-operating current source is considered as open circuit and the non-operating voltage source is considered as short circuit. ✔

d. Both the non-operating current and voltage source are considered as short circuit.

Your answer is correct.

The correct answer is:
The non-operating current source is considered as open circuit and the non-operating voltage source is considered as short circuit.

◄ Quiz (06.02.2022) Jump to... Mid Sem Exam 2 (AI & DS branch) ►

| | |
|---|---|
| **Started on** | Wednesday, 16 February 2022, 9:21 AM |
| **State** | Finished |
| **Completed on** | Wednesday, 16 February 2022, 9:55 AM |
| **Time taken** | 34 mins 18 secs |
| **Marks** | 18.00/19.00 |
| **Grade** | **18.95** out of 20.00 (**95**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

Ohm's law for magnetic circuits is-

- a. $F=\phi/S$
- b. $F=\phi S$ ✔
- c. $F=\phi 2S$
- d. None of These

Your answer is correct.

The correct answer is:
$F=\phi S$

Question **2**

Correct

Mark 1.00 out of 1.00

If 22 W of power are applied to the primary of an ideal transformer with a turns ratio of 10, the power delivered to the secondary load is

- a. 2.2 W
- b. 220 W
- c. 22 W ✔
- d. 0 W

Your answer is correct.

The correct answer is:
22 W

Question **3**

Correct

Mark 1.00 out of 1.00

A ring having a cross-sectional area of 500 mm2, a circumference of 400 mm and ϕ=800microWb has a coil of 200 turns wound around it. Calculate the flux density of the ring.

- a. 1.6 T ✔
- b. 4.6 T
- c. 3.6 T
- d. 2.6 T

Your answer is correct.

The correct answer is:
1.6 T

Question **4**

Correct

Mark 1.00 out of 1.00

E.M.F EQUATION OF THE TRANSFORMER IS.....

- a. E1 = 4.44 f N1 Øm , E2=4.44 f N2 Øm
- b. All of the above ✔
- c. E1= 4.44 N1 Øm/T , E2=4.44 N2 Øm/T
- d. E1= 4.44 f N1 Bm A , E2 = 4.44 f N2 BmA

Your answer is correct.

The correct answer is:
All of the above

Question **5**

Correct

Mark 1.00 out of 1.00

**The phase relationship between the primary and secondary voltages of a transformer is:**

a. **In same phase**

b. **180 degrees out of phase** ✔

c. **None of these**

d. **90 degrees out of phase**

Your answer is correct.

The correct answer is:
**180 degrees out of phase**

Question **6**

Complete

Not graded

THE FULL-LOAD COPPER LOSS OF A TRANSFORMER IS 128 W. AT HALF-LOAD, THE COPPER LOSS WILL BE

- a. 256 W
- b. 128 W
- c. 0 W
- d. 64 W

Your answer is incorrect.

The correct answer is:
256 W

Question **7**

Correct

Mark 1.00 out of 1.00

Which of the following properties is not necessarily desirable for the material for transformer core?

- a. High thermal conductivity ✔
- b. Adequate mechanical strength
- c. High permeability
- d. Low hysteresis loss

Your answer is correct.

The correct answer is:
High thermal conductivity

Question **8**

Correct

Mark 1.00 out of 1.00

PURE INDUCTIVE CIRCUIT

- a. None of these
- b. Takes power from the line during some part of the cycle and then returns back to it during other part of the cycle ✔
- c. Does not take power at all from a line
- d. Consumes some power on average

Your answer is correct.

The correct answer is:
Takes power from the line during some part of the cycle and then returns back to it during other part of the cycle

Question **9**

Correct

Mark 1.00 out of 1.00

For the transformer at no-load, the primary current is 4 A at power factor 0.35 and connected across a power supply of 230 Volts, 50Hz, the core loss and magnetizing current are ————————-respectively

- a. 322 W, 1.4 A ✔
- b. 400 W, 2A
- c. 433 W, 2.2 A
- d. 450 W, 3 A

Your answer is correct.

The correct answer is:
322 W, 1.4 A

Question **10**

Correct

Mark 1.00 out of 1.00

**The efficiency of a 400 kVA single phase transformer is 98.77% at full load, 0.8 power factor and 99.13% at half load, unity power factor. The copper losses at full and half loads are respectively:**

a. **1928 W and 494 W**

b. **2973 W and 743 W** ✔

c. **1928 W and 743 W**

d. **2973 W and 494 W**

Your answer is correct.

The correct answer is:
**2973 W and 743 W**

Question **11**

Correct

Mark 1.00 out of 1.00

Which of the following does not change in a transformer?

- a. Current
- b. Voltage
- c. All of the above
- d. Frequency ✔

Your answer is correct.

The correct answer is:
Frequency

Question **12**

Correct

Mark 1.00 out of 1.00

The primary of a transformer is connected to a 6 V battery. The turns ratio is 1:3 and the secondary load, (RL), is 100 ohm. The voltage across the load is-

- a. 18 V
- b. 6 V
- c. 3 V
- d. 2 V
- e. 0 V ✔

Your answer is correct.

The correct answer is:
0 V

Question **13**

Correct

Mark 1.00 out of 1.00

The primary coil of a transformer has 100 turns and its secondary coil has 400 turns. If the ac current in the secondary coil is 2 A, what is the current in its primary coil?

- a. 1/2 A
- b. 2 A
- c. 4 A
- d. 8 A ✔

Your answer is correct.

The correct answer is:
8 A

Question **14**

Incorrect

Mark 0.00 out of 1.00

**Transformer core is laminated**

a. **To avoid eddy current losses**

b. **because its is difficult to fabricate core**

c. **To avoid both eddy current and hysteresis losses** ✖

d. **To avoid hysteresis losses**

Your answer is incorrect.

The correct answer is:
**To avoid eddy current losses**

Question **15**

Correct

Mark 1.00 out of 1.00

TRANSFER OF ELECTRICAL POWER FROM PRIMARY TO SECONDARY IN A TRANSFORMER TAKES PLACE

- a. Electrically
- b. None of these
- c. Electromagnetically ✔
- d. Magnetically

Your answer is correct.

The correct answer is:
Electromagnetically

Question **16**

Correct

Mark 1.00 out of 1.00

THE UNIT OF MAGNETIC FLUX IS

- a. Weber ✔
- b. Ampere-turn/weber
- c. Henry
- d. Ampere/meter

Your answer is correct.

The correct answer is:
Weber

Question **17**

Correct

Mark 1.00 out of 1.00

**The efficiency of a 400 kVA single phase transformer is 98.77% at full load 0.8 power factor and 99.13% at half load unity power factor. The Iron losses at full and half loads are respectively:**

- a. **1012 W and 1012 W** ✔
- b. **1012 W and 506 W**
- c. **2024 W and 1012 W**
- d. **2024 W and 2024 W**

Your answer is correct.

The correct answer is:
**1012 W and 1012 W**

Question **18**

Correct

Mark 1.00 out of 1.00

**The eddy current losses in the transformer will be reduced if:**

a. **laminations are thick.**

b. **number of turns in the primary winding is reduced.**

c. **number of turns in the secondary winding is reduced.**

d. **laminations are thin.** ✔

Your answer is correct.

The correct answer is:
**laminations are thin.**

Question **19**

Correct

Mark 1.00 out of 1.00

If the current in one coil becomes steady, the magnetic field is?

- a. Infinity
- b. Halves
- c. Doubles
- d. Zero ✔

Your answer is correct.

The correct answer is:
Zero

Question **20**

Correct

Mark 1.00 out of 1.00

What happens to the MMF when the magnetic flux decreases?

- a. Zero
- b. remain constant
- c. Decreases ✔
- d. increases

Your answer is correct.

The correct answer is:
Decreases

◄ Mid Sem Exam- 1 (AI & DS branch) Jump to... Lab Attendance AI&DS Students ►

| | |
|---|---|
| **Started on** | Sunday, 6 February 2022, 4:09 PM |
| **State** | Finished |
| **Completed on** | Sunday, 6 February 2022, 4:20 PM |
| **Time taken** | 10 mins 12 secs |
| **Marks** | 7.00/9.00 |
| **Grade** | **7.78** out of 10.00 (**78**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

Why the transformer winding losses are considered as variable losses ?

- (●) a. Because they depend on current and current varies according to load requirement. ✔
- ( ) b. Because they depend on voltage and voltage varies according to load requirement.
- ( ) c. Because they depend on (voltage & current) and (Voltage & current) varies according to connected load requirement.

Your answer is correct.

Question **2**

Correct

Mark 1.00 out of 1.00

A 2000/200 V, 1 Phase, 50 Hz transformer has primary winding resistance and reactance of 2.5 ohm and 3.0 ohm. The secondary winding resistance and reactance of 0.015 ohm and 0.02 ohm respectively.

calculate the equivalent impedance refer to primary side.

- a. 5 ohm
- b. 4 ohm
- c. 6.40 ohm ✔
- d. 9 ohm

Your answer is correct.

Question **3**

Incorrect

Mark 0.00 out of 1.00

A 2000/200 V, 1 Phase, 50 Hz transformer has secondary winding resistance and reactance of 0.015 ohm and 0.02 ohm respectively.

calculate secondary impedance refer to primary side.

- a. 25 ohm
- b. 0.25 ohm ✖
- c. 2.5 ohm

Your answer is incorrect.

Question **4**

Correct

Mark 1.00 out of 1.00

A 2000/200 V, 1 Phase, 50 Hz transformer has secondary winding resistance and reactance of 0.015 ohm and 0.02 ohm respectively.

calculate secondary resistance refer to primary side.

- a. 0.15 ohm
- b. 15 ohm
- c. 1.5 ohm ✔

Your answer is correct.

Question **5**

Incorrect

Mark 0.00 out of 1.00

A Single phase transformer has load terminal voltage of 230 V and 205 V at No-load and Load condition respectively. What will be the % voltage regulation ?

- a. 10.87%
- b. 12.19% ✖

Your answer is incorrect.

Question **6**

Correct

Mark 1.00 out of 1.00

What should be the value of voltage regulation for an ideal transformer ?

- a. 50%
- b. 10%
- c. Zero ✔
- d. Infinite

Your answer is correct.

Question **7**

Correct

Mark 1.00 out of 1.00

A 2000/200 V, 1 Phase, 50 Hz transformer has primary winding resistance and reactance of 2.5 ohm and 3.0 ohm. The secondary winding resistance and reactance of 0.015 ohm and 0.02 ohm respectively.

calculate the equivalent resistance refer to primary side.

- (●) a. 4.0 ohm ✔
- ( ) b. 2.5 ohm
- ( ) c. 1.5 ohm

Your answer is correct.

Question **8**

Correct

Mark 1.00 out of 1.00

A 2000/200 V, 1 Phase, 50 Hz transformer has secondary winding resistance and reactance of 0.015 ohm and 0.02 ohm respectively.

calculate secondary reactance refer to primary side.

- a. 20 ohm
- b. 0.2 ohm
- c. 2 ohm ✔

Your answer is correct.

Question **9**

Correct

Mark 1.00 out of 1.00

A 2000/200 V, 1 Phase, 50 Hz transformer has primary winding resistance and reactance of 2.5 ohm and 3.0 ohm. The secondary winding resistance and reactance of 0.015 ohm and 0.02 ohm respectively.

calculate the total copper losses of transformer, if the primary winding current is 5.5 Amp.

- a. 1.21 W
- b. 121 W ✔
- c. 12.1 W
- d. 1210 W

Your answer is correct.

◄ Quiz (30.01.2022) Jump to... Mid Sem Exam- 1 (AI & DS branch) ►

| | |
|---|---|
| **Started on** | Sunday, 12 December 2021, 6:35 PM |
| **State** | Finished |
| **Completed on** | Sunday, 12 December 2021, 6:40 PM |
| **Time taken** | 5 mins 3 secs |
| **Marks** | 5.00/5.00 |
| **Grade** | **10.00** out of 10.00 (**100**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

The Sinusoidal Voltage wave has maximum value of Vm. What will be its Average value?

- a. Vm/3.14
- b. 2Vm
- c. 2Vm/3.14 ✔
- d. Vm

Your answer is correct.

Question **2**

Correct

Mark 1.00 out of 1.00

The Average value of Half wave rectifier output voltage having maximum value of Vm, is-

- a. Vm/3.14 ✔
- b. Vm
- c. 2Vm/3.14
- d. 3Vm/3.14

Your answer is correct.

Question **3**

Correct

Mark 1.00 out of 1.00

For the given equation: V = 200 Sin 314t

calculate the Average value of voltage

- a. (200/3.14) Volt
- b. None of These
- c. (400/ 3.14) Volt ✔
- d. (200) Volt

Your answer is correct.

Question **4**

Correct

Mark 1.00 out of 1.00

For the given equation: V = 100 Sin 314t

calculate the Maximum value of voltage?

- a. None of These
- b. 100 Volt ✔
- c. 100/3.14
- d. 200/3.14

Your answer is correct.

Question **5**

Correct

Mark 1.00 out of 1.00

What will be the average value of pure sinusoidal current wave for the duration from 0 to 360.

- a. 0 ✔
- b. Infinite
- c. Maximum value of current
- d. None of These

Your answer is correct.

◄ Quiz (05.12.2021) (copy)

Jump to...

Quiz (26.12.2021) ►

| | |
|---|---|
| **Started on** | Sunday, 14 November 2021, 9:44 PM |
| **State** | Finished |
| **Completed on** | Sunday, 14 November 2021, 9:52 PM |
| **Time taken** | 8 mins 20 secs |
| **Marks** | 6.00/7.00 |
| **Grade** | **8.57** out of 10.00 (**86**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

Select the correct statement.

- a. All the loop are compulsorily mesh.
- b. All the Mesh are compulsorily loop. ✔

Your answer is correct.

Question **2**

Correct

Mark 1.00 out of 1.00

Select the correct statement.

- a. None of these
- b. KVL stands for- Algebraic sum of current in a closed loop/ Mesh is zero.
- c. KVL stands for- Algebraic sum of voltage at a node/junction is zero.
- d. KVL stands for- Algebraic sum of voltage in a closed loop/ Mesh is zero. ✔

Your answer is correct.

Question **3**

Correct

Mark 1.00 out of 1.00

Which of the following Electrical supply system is used for power transmission over long distance?

- a. DC
- b. 3 Phase AC ✔
- c. 1 Phase AC
- d. None of These

Your answer is correct.

Question **4**

Correct

Mark 1.00 out of 1.00

The supply frequency in India is-

- a. 50 Hz for single and 60 Hz for three phase AC supply system
- b. 60 Hz for single and 50 Hz for three phase AC supply system
- c. 0 Hz for both single and three phase AC supply system
- d. 50 Hz for both single and three phase AC supply system ✔

Your answer is correct.

Question **5**

Correct

Mark 1.00 out of 1.00

The domestic supply is -

- a. Single phase AC supply ✔
- b. Three phase AC supply
- c. DC supply
- d. None of These

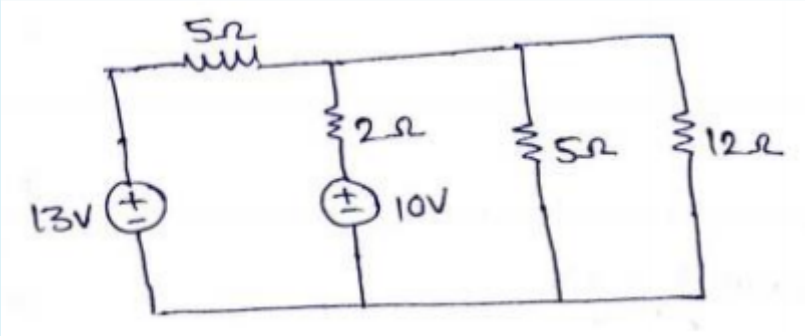
Your answer is correct.

Question **6**

Incorrect

Mark 0.00 out of 1.00

Find the current through 12 ohm resistance.




a. 0.64 A

b. 0.164 A

c. 64 A

d. 6.4 A

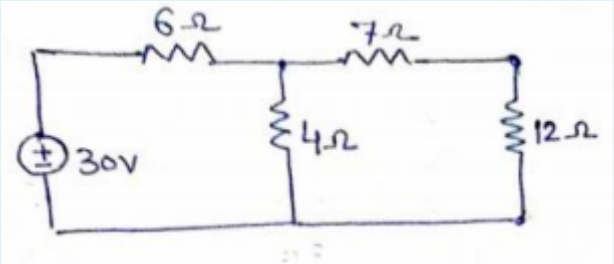
Your answer is incorrect.

Question **7**

Correct

Mark 1.00 out of 1.00

Find the current through 12 ohm resistance.




a. 0.0557 A

b. 55.70 A

c. 0.557 A ✔

d. 5.57 A

Your answer is correct.

◄ Practice Problem (KVL + KCL) Jump to... Quiz (28.11.2021) ►

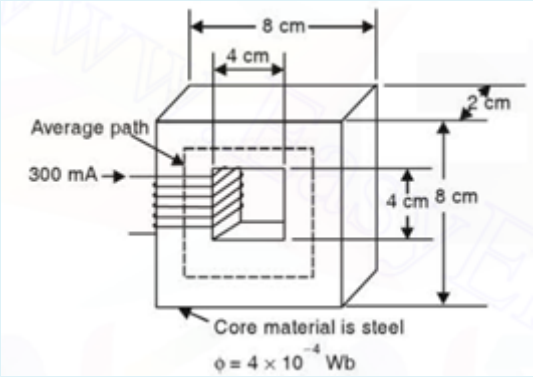
| | |
|---|---|
| **Started on** | Sunday, 16 January 2022, 6:07 PM |
| **State** | Finished |
| **Completed on** | Sunday, 16 January 2022, 6:27 PM |
| **Time taken** | 20 mins 13 secs |
| **Marks** | 5.00/8.00 |
| **Grade** | **6.25** out of 10.00 (**63**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

If the magnetising force required at the working flux density in figure below is 500 AT/m, the required number of turns is:




Select one:

- a. 400 ✔
- b. 240
- c. 320
- d. 120

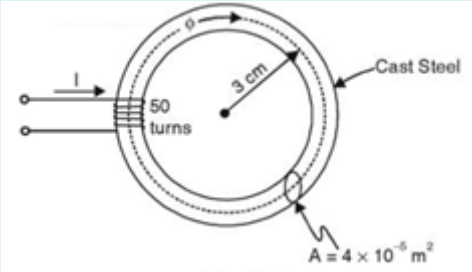
The correct answer is: 400

Question **2**

Incorrect

Mark 0.00 out of 1.00

The cross-section area of the core shown in figure is 4x10^-5 m^2. If the flux in the core is 2x10^-5 Wb, Given that H corresponding to working flux density is 500 AT/m. (from B-H curve). What is the flux density in the core? and What current must be supplied to the winding to produce the given flux?




Select one:

- a. 0.5 T, 2.343 A respectively ✖
- b. 0.75T, 1.772A respectively
- c. 0.5 T, 1.885 A respectively
- d. 0.75T, 1.885 A respectively

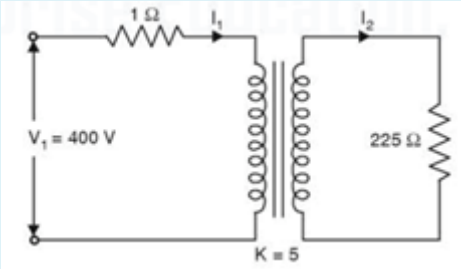
The correct answer is: 0.5 T, 1.885 A respectively

Question **3**

Correct

Mark 1.00 out of 1.00

In the circuit shown in the figure, the primary current is




Select one:

- a. 40A ✔
- b. 20A
- c. 10A
- d. 30A

The correct answer is: 40A

Question **4**

Correct

Mark 1.00 out of 1.00

An 8H choke coil is carrying a current of 500mA. The energy stored in the magnetic field is:

Select one:

- a. 1J ✔
- b. 2J
- c. 0.5J
- d. 4J

The correct answer is: 1J

Question **5**

Correct

Mark 1.00 out of 1.00

A coil having 300 square loops each of side 10cm is placed normal to the magnetic flux which increases at a rate of 1 T/sec. the induced emf is:

Select one:

- a. 0.3V
- b. 0.5V
- c. 1V
- d. 3V ✔

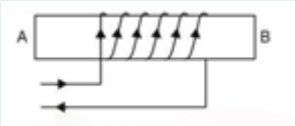
The correct answer is: 3V

Question **6**

Incorrect

Mark 0.00 out of 1.00

If in the given figure, Iron bar AB is withdrawn keeping the current same, the flux density will:




Select one:

- a. Decrease
- b. Remains unchanged ✖
- c. None of the above
- d. Increase

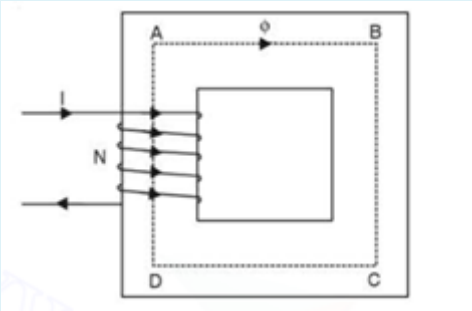
The correct answer is: Decrease

Question **7**

Correct

Mark 1.00 out of 1.00

In the figure shown below, the path of the magnetic circuit is _____ . If the magnetic path is L, then magnetising force is _____.




Select one:

- a. ABCD, NIL
- b. ABCDA, NI/L ✔
- c. ABCDA , NIL
- d. ABCD, NI/L

The correct answer is: ABCDA, NI/L

Question **8**

Incorrect

Mark 0.00 out of 1.00

When the relative permeability of the material is slightly more than 1 it is called _____ material and _____ material has the highest permeability.

Select one:

- a. Diamagnetic, paramagnetic.
- b. Ferromagnetic, Diamagnetic.
- c. Paramagnetic, Diamagnetic. ✖
- d. Diamagnetic, Paramagnetic.

The correct answer is: Diamagnetic, Paramagnetic.

◄ Quiz (26.12.2021) Jump to... Quiz (24.01.2022) ►

| | |
|---|---|
| **Started on** | Monday, 24 January 2022, 4:43 PM |
| **State** | Finished |
| **Completed on** | Monday, 24 January 2022, 4:58 PM |
| **Time taken** | 15 mins |
| **Marks** | 7.00/7.00 |
| **Grade** | **10.00** out of 10.00 (**100**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

When DC is provided to Transformer.

- a. magnitude flux and EMF both are 0
- b. Constant magnitude EMF is produced with Flux=0
- c. Constant magnitude flux is produced with EMF=0 ✔

Your answer is correct.

Question **2**

Correct

Mark 1.00 out of 1.00

For a step up 110/220 V 1 phase transformer, the frequency of input voltage is 50 Hz, what will be the frequency of output voltage?

- a. 100 Hz
- b. 50 Hz ✔
- c. 25 Hz

Your answer is correct.

Question **3**

Correct

Mark 1.00 out of 1.00

The voltage per turn of the primary of the transformer is _____ the voltage per turn of the secondary.

Select one:

- a. Less than
- b. More than
- c. The same as ✔
- d. None of the above

Question **4**

Correct

Mark 1.00 out of 1.00

What happens to the Transformer on supply DC.

- a. Copper losses increases rapidly. ✔
- b. None of These
- c. Both Correct
- d. Iron losses increases rapidly.

Your answer is correct.

Question **5**

Correct

Mark 1.00 out of 1.00

A 4000/400 V, 40KVA ideal transformer has 66 turns in the secondary. The number of primary turns and full load primary & secondary current is_____ respectively.

Select one:

- a. 660, 100A, 10A
- b. 660, 10A, 100A ✔
- c. 330, 100A, 10A
- d. 330, 5A, 50A

Question **6**

Correct

Mark 1.00 out of 1.00

Which one of the followings are the variable losses?

- a. Winding losses ✔
- b. None of These.
- c. Iron losses
- d. Both

Your answer is correct.

Question **7**

Correct

Mark 1.00 out of 1.00

For a ideal transformer, the permeability must be .....

- a. Unity
- b. Infinite ✔
- c. None of These.
- d. 0

Your answer is correct.

◄ Quiz (16.01.2022)

Jump to...

Quiz (30.01.2022) ►

| | |
|---|---|
| **Started on** | Sunday, 26 December 2021, 6:45 PM |
| **State** | Finished |
| **Completed on** | Sunday, 26 December 2021, 7:20 PM |
| **Time taken** | 35 mins 32 secs |
| **Overdue** | 15 mins 32 secs |
| **Marks** | 5.00/9.00 |
| **Grade** | **5.56** out of 10.00 (**56**%) |

Question **1**

Incorrect

Mark 0.00 out of 1.00

The Voltage, V= 325 Sin (314t + 30) is applied to a choke coil.

During the test a watt meter is connected and ammeter is connected for measurement of power and current. The wattmeter reading is 4 kW and ammeter reading is 20 Amp. What will be the Resistance of the circuit ?

- a. 11.49 ohm ✖
- b. None of These
- c. 16.25 ohm
- d. 9.99 ohm

Your answer is incorrect.

The correct answer is:
9.99 ohm

Question **2**

Incorrect

Mark 0.00 out of 1.00

Select the correct statement.

- a. None of These.
- b. Poor power factor leads to high copper losses and poor efficiency.
- c. Both correct. ✖
- d. Poor power factor leads to high magnetic  losses and poor efficiency.

Your answer is incorrect.

The correct answer is:
Poor power factor leads to high copper losses and poor efficiency.

Question **3**

Correct

Mark 1.00 out of 1.00

Select the correct condition for a R-L-C series circuit to be in Resonance.

- a. At resonance, impedance will be minimum.
- b. Both correct. ✔
- c. None of These
- d. At resonance, Current will be maximum.

Your answer is correct.

The correct answers are:
At resonance, Current will be maximum. ,

Both correct.

Question **4**

Correct

Mark 1.00 out of 1.00

The Voltage, V= 325 Sin (314t + 30) is applied to a choke coil.

During the test a watt meter is connected and ammeter is connected for measurement of power and current. The wattmeter reading is 4 kW and ammeter reading is 20 Amp. What will be the Power Factor of the circuit ?

- a. 0.87 leading
- b. 0.87 lagging ✔
- c. Unity
- d. 1.23 lagging

Your answer is correct.

The correct answer is:
0.87 lagging

Question **5**

Correct

Mark 1.00 out of 1.00

The Voltage, V= 325 Sin (314t + 30) is applied to a pure Resistor of 10 ohm, What will be the Average power dissipated by the resistor?

a. 0.5281 kW

b. 5281 kW

c. 5.281 kW ✔

d. 52.1 kW

Your answer is correct.

The correct answer is:
5.281 kW

Question **6**

Correct

Mark 1.00 out of 1.00

What will happen, if 10 V dc (ideal)source is connected in parallel with 12 V dc (ideal) source.

- a. Heating will take place in circuit, due to flow of very high current. ✔
- b. The net voltage will be the 22 V
- c. The net voltage will be the 2 V
- d. Net voltage will be 0.

Your answer is correct.

The correct answer is:
Heating will take place in circuit, due to flow of very high current.

Question **7**

Incorrect

Mark 0.00 out of 1.00

The Voltage, V= 325 Sin (314t + 30) is applied to a pure Resistor of 10 ohm, What will be the current flowing through the resistor?

- a. 32.5 L 90
- b. 32.5 L -90
- c. 32.5 L 0 ✖
- d. 32.5 L 30

Your answer is incorrect.

The correct answer is:
32.5 L 30

Question **8**

Correct

Mark 1.00 out of 1.00

The Voltage, V= 325 Sin (314t + 30) is applied to a pure inductor, What will be the power factor?

- a. 0 leading
- b. 1 leading
- c. 0 lagging ✔
- d. 1 lagging

Your answer is correct.

The correct answer is:
0 lagging

Question **9**

Incorrect

Mark 0.00 out of 1.00

The Voltage, V= 325 Sin (314t + 30) is applied to a choke coil.

During the test a watt meter is connected and ammeter is connected for measurement of power and current. The wattmeter reading is 4 kW and ammeter reading is 20 Amp. What will be Apparent Power?

- a. 6.5 kVA ✖
- b. 3.250 kVA
- c. 4.596 kVA
- d. None of These

Your answer is incorrect.

The correct answer is:
4.596 kVA

◄ Quiz (12.12.2021) Jump to... Quiz (16.01.2022) ►

| | |
|---|---|
| **Started on** | Sunday, 28 November 2021, 9:40 PM |
| **State** | Finished |
| **Completed on** | Sunday, 28 November 2021, 9:48 PM |
| **Time taken** | 7 mins 53 secs |
| **Grade** | **10.00** out of 10.00 (**100**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

Select the Correct ststement-

- a. All the Loops are Meshes
- b. All the Meshes are Loops ✔
- c. There in no difference in Meshes and loops; they are always same

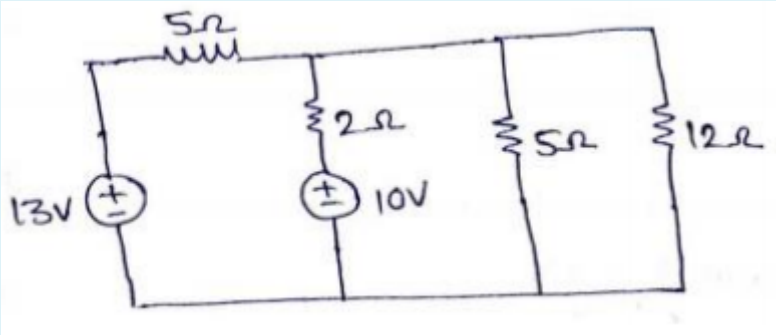
Your answer is correct.

Question **2**

Correct

Mark 1.00 out of 1.00

Find the current through 12 ohm resistance.




a. None of These

b. 64.0

c. 6.4 A

d. 0.64 A ✔

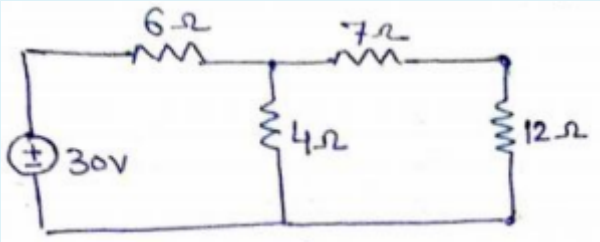
Your answer is correct.

Question **3**

Correct

Mark 1.00 out of 1.00

Find the current through 12 ohm resistance.




- a. 0.557 A ✔
- b. 5.557
- c. None of These
- d. 0.157 A

Your answer is correct.

Question **4**

Correct

Mark 1.00 out of 1.00

What is Thevenin's equivalent circuit?

- a. A voltage source in series with thevenin's resistance and load resistance. ✔
- b. None of These
- c. A voltage source in Parallel with thevenin's resistance and load resistance.

Your answer is correct.

Question **5**

Correct

Mark 1.00 out of 1.00

Thevenins equivalent resistance is calculated by-

- a. Open circuit both voltage source and current source.
- b. Open circuit the current source and short circuit the voltage source. ✔
- c. Open circuit the voltage source and short circuit the current source.
- d. Short circuit both voltage source and current source.

Your answer is correct.

Question **6**

Correct

Mark 1.00 out of 1.00

What does a short circuit and open circuit means ?

- a. Open circuit and Short circuit both has resistance value Zero.
- b. Short circuit resistance is Zero, whereas open circuit resistance is infinite. ✔
- c. Open circuit and Short circuit both has resistance value Infinite.
- d. Short circuit resistance is infinite whereas open circuit resistance is Zero.

Your answer is correct.

Question **7**

Correct

Mark 1.00 out of 1.00

Which of the following statement is correct for Superposition Theorem?

- a. Inactive voltage and current sources are treated as open circuit.
- b. Inactive current source is treated as open circuit and inactive voltage source is treated as short circuit. ✔
- c. Inactive current source is treated as short circuit and inactive voltage source is treated as open circuit.
- d. Inactive voltage and current sources are treated as open circuit.

Your answer is correct.

Question **8**

Correct

Mark 1.00 out of 1.00

Minimum number of sources required for applying Super Position Theorem ?

- a. 1
- b. 2 ✔
- c. 3
- d. 4

Your answer is correct.

Question **9**

Correct

Mark 1.00 out of 1.00

Select the correct statement

- a. Minimum 1 Energy Sources are required for Superposition Theorem.
- b. Minimum 2 Energy Sources are required for Superposition Theorem. ✔
- c. Minimum 1 Voltage Sources and 1 current source are required for Superposition Theorem.
- d. Minimum 1 Energy Sources and 2 load resistance are required for Superposition Theorem.
  - b. Minimum 1 Voltage Sources and 1 current source are required for Superposition Theorem.

Your answer is correct.

Question **10**

Correct

Mark 1.00 out of 1.00

A 15 Amp. current source is connected in Parallel with 2 ohm resistance. By source transformation, it can be converted into-

- a. Voltage source of 30 Volt in series with 2 ohm resistance. ✔
- b. Voltage source of 30 Volt in parallel with 2 ohm resistance.
- c. Voltage source of 15 Volt in parallel with 2 ohm resistance.
- d. Voltage source of 15 Volt in series with 2 ohm resistance.

Your answer is correct.

◄ Quiz (14.11.2021) Jump to... Quiz (05.12.2021) (copy) ►

| | |
|---|---|
| **Started on** | Sunday, 30 January 2022, 6:44 PM |
| **State** | Finished |
| **Completed on** | Sunday, 30 January 2022, 6:59 PM |
| **Time taken** | 15 mins 1 sec |
| **Marks** | 7.00/8.00 |
| **Grade** | **8.75** out of 10.00 (**88**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

OC test provide the information about.....

- (●) a. Core losses ✔
- ( ) b. Both
- ( ) c. None of these
- ( ) d. Copper losses

Your answer is correct.

Question **2**

Correct

Mark 1.00 out of 1.00

SC test provide the information about.....

- a. None of These
- b. Core loss
- c. Both
- d. Copper loss ✔

Your answer is correct.

Question **3**

Correct

Mark 1.00 out of 1.00

SC test is performed at.....

- a. Rated current and rated voltage.
- b. Rated current at reduced voltage. ✔
- c. None of These.
- d. Rated voltage and reduced current.

Your answer is correct.

Question **4**

Incorrect

Mark 0.00 out of 1.00

SC test provide the information about.....

- a. Load component of current.
- b. All of these.
- c. Core loss component of current. ✖
- d. Magnetizing component of current.

Your answer is incorrect.

Question **5**

Correct

Mark 1.00 out of 1.00

From No load to full load .....

- a. Transformer efficiency follows V shape curve.
- b. Transformer efficiency follows inverted-V shape curve. ✔
- c. Flat curve

Your answer is correct.

Question **6**

Correct

Mark 1.00 out of 1.00

OC test provide the information about.....

- a. None of these
- b. No load current ✔
- c. Both
- d. Full load current.

Your answer is correct.

Question **7**

Correct

Mark 1.00 out of 1.00

Condition for maximum efficiency of transformer is-

- a. Iron losses > Copper losses
- b. None of These.
- c. Iron losses = Copper losses ✔
- d. Iron losses < Copper losses

Your answer is correct.

Question **8**

Correct

Mark 1.00 out of 1.00

OC test is performed at -

- a. Rated current
- b. None of These.
- c. Both
- d. Rated voltege ✔

Your answer is correct.

◄ Quiz (24.01.2022) Jump to... Quiz (06.02.2022) ►