As the load current increases, the number of revolution of disc in energy meter is 1 point

- [ ] increased
- [ ] Decreased
- [x] remains same
- [ ] none of these

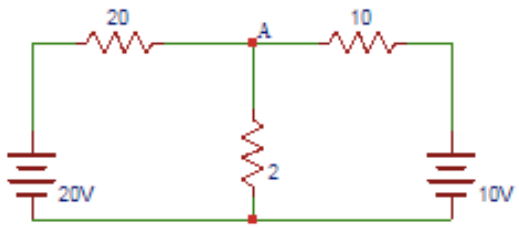
Clear selection

KCL is based on the fact that____- 1 point

- [ ] There is a possibility for a node to store energy.
- [ ] Charge accumulation may or may not be possible.
- [ ] Charge accumulation is possible at node
- [x] There cannot be an accumulation of charge at a node.

Clear selection

Find the voltage across 2Ω resistor due to 20V source in the circuit shown below. 1 point



- 1.418
- 1.538
- 2.80
- 2.75

Clear selection

In Thevenin's theorem Vth is _____ 1 point

- (●) A single voltage source
- ( ) Infinite voltage sources
- ( ) Sum of two voltage sources
- ( ) None of the above

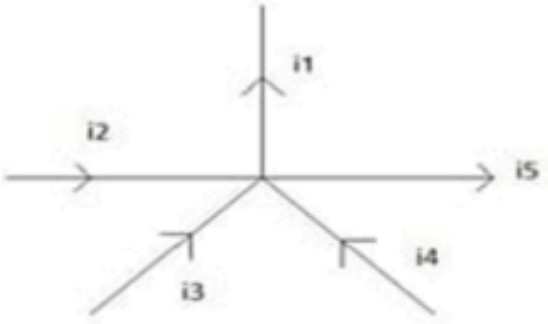
Clear selection

To conduct the open circuit and short circuit test, tests are conducted on the which side 1 point

- ( ) Secondary and Primary Side
- ( ) H.V side and L.V. Side
- ( ) Primary and Secondary Side
- (●) L.V side and H.V side

Clear selection

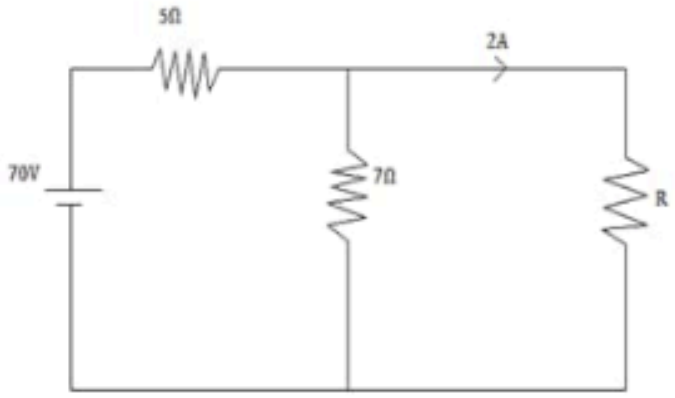
Relation between currents according to KCL is____ 1 point



- i1-i5=i2-i3-i4
- i1+i4+i3=i5+i2
- i1=i2=i3=i4=i5
- i1+i5=i2+i3+i4

Clear selection

Find R 1 point



- 17.5 Ω
- 17.2 Ω
- 17.4 Ω
- 17.8 Ω

Clear selection

Energy meter is a 1 point

- recording instrument
- None of these
- Integrating instrument
- indicating instrument

Clear selection

In a two-wattmeter method, both the wattmeter has identical reading. The power factor of the load is 1 point

- 0.5
- unity
- 0.8
- zero
- Other: _____

Clear selection

One of the wattmeter reads 500 watt and other reads 1000 watt in two wattmeter method. Calculate the power factor_____? 1 point

- ○ 0.540
- ○ 0.870
- ◉ 0.866
- ○ 0
- ○ Other: _____

Clear selection

Isc is found across the _____ terminals of the network. 1 point

- ○ Output
- ○ Either input or output
- ○ Neither input nor output
- ◉ Input

Clear selection

A 10kVA transformer, 400V / 200V single phase transformer having primary winding current (HV) is

1 point

- ○ 50A
- ◉ 25A
- ○ 20A
- ○ 4000A

Clear selection

Wattmeter is designed on the principle of

1 point

- ◉ Dynamometer type Instrument
- ○ Electrostatic type Instrument
- ○ Moving Iron type Instrument
- ○ Thermocouple type Instrument

Clear selection

Energy meter is a 1 point

- recording instrument
- None of these
- Integrating instrument
- indicating instrument

Clear selection

In a two-wattmeter method, both the wattmeter has identical reading. The power factor of the load is 1 point

- 0.5
- unity
- 0.8
- zero
- Other: _____

Clear selection

.....theorem is quite useful when the current in one branch of a network is to be determined or when the current in an added branch is to be calculated. 1 point

- (●) Superposition
- ( ) Thevenin
- ( ) Norton
- ( ) Maximum Power Transfer

Clear selection

Superposition theorem is not applicable for 1 point

- ( ) Voltage calculations
- (●) Power calculations
- ( ) Passive elements
- ( ) Bilateral elements

Clear selection

In Superposition theorem, while considering a source, all other current sources are? 1 point

- ○ removed from the circuit
- ○ short circuited
- ○ change its position
- ◉ open circuited

Clear selection

In source transformation _____ 1 point

- ○ Voltage source remains the same
- ○ Current source remains the same
- ○ Both voltage and current source remains the same
- ◉ Resistance remain the same

Clear selection

Which of the following instruments disc is present

1 point

- (●) Energymeter
- ( ) Ammeter
- ( ) Voltmeter
- ( ) Wattmeter

Clear selection

Norton theorem is _____ form of an equivalent circuit.

1 point

- ( ) None of the above
- ( ) Voltage
- ( ) Both current and voltage
- (●) Current

Clear selection

A linear circuit is one whose parameter _____ 1 point

- ○ Changes with change in current
- ○ Changes with change in voltage
- ○ Do not changes with voltage and current.
- ◉ Changes with both voltage and current

Clear selection

Which of the following does not change in a transformer? 1 point

- ◉ Frequency
- ○ All of the above
- ○ Voltage
- ○ Current

Clear selection

Iron loss of a transformer can be measured by

1 point

- ○ any type of wattmeter
- ○ frequency meter
- ○ unity power factor wattmeter
- ◉ low power factor wattmeter

Clear selection

Norton's theorem is true for _____

1 point

- ○ Non-Linear network
- ○ Both linear networks and nonlinear networks
- ◉ Linear network
- ○ Neither linear networks nor non-linear networks

Clear selection

The algebraic sum of voltages around any closed path in a network is equal to ____ 1 point

- ○ Infinity
- ○ 1
- ◉ 0
- ○ Negative polarity

Clear selection

The meter constant of single phase energy meter is expressed in terms of 1 point

- ◉ Revolutions/kWh
- ○ kW/kWh
- ○ Amps/kW
- ○ Volts/kWh

Clear selection

In two wattmeter method, one wattmeter reads 350 watts with power factor of 0.8 lag then calculate the reading of another wattmeter _____watt? 1 point

- (●) 138.6
- ( ) 136.6
- ( ) 137.6
- ( ) 139.6

Clear selection

Roll Number (E__) or (F__) *

F24

Short circuit test conducted on 1 point

- ( ) Rated voltage
- ( ) high frequency supply
- (●) Rated current
- ( ) direct current

Clear selection

Under OC test all the meters are connected on low voltage side 1 point

- ○ None of these
- ◉ Low range of ammeter, voltmeter and watt meter are sufficient
- ○ Both A & B
- ○ Very low current on HV side

Clear selection

Induction type single phase energy meters measure electric energy in 1 point

- ○ kW
- ○ VAR
- ◉ kWh
- ○ None of these

Clear selection