

1

Energy' is defined as 'the

(A) rate of doing work'.

<https://selldocx.com/products>

[/test-bank-an-introduction-to-electrical-science-1e-waygood](#)

(B) the ability to do work'.

Answer:

(B) the ability to do work'.

(C) rate of transferring power'.

(D) mass multiplied by distance moved'.

2

Work' is defined as 'the

(A) transfer of energy from a body at a higher temperature to one at a lower temperature',

Answer:

(B) transfer of energy from one form into another'.

(B) transfer of energy from one form into another'.

(C) the rate of transferring power'.

3

Heat' is defined as 'the

(A) transfer of energy from a body at a higher temperature to one at a lower temperature',

Answer:

(B) thermal energy.

(A) transfer of energy from a body at a higher temperature to one at a lower temperature',

(C) the temperature of a body.

4

Power' is defined as 'the

(A) rate of doing work'.

(B) rate of heat transfer'.

Answer:

(C) rate of energy transfer'.

(D) any of the above.

(D) any of the above.

5

The SI unit of measurement for energy is the

(A) watt.

(B) joule.

(C) kelvin.

(D) kilowatt hour.

Answer:
(B)joule.

6

The SI unit of measurement for work is the

(A) watt.

(B) joule.

(C) kelvin.

(D) kilowatt hour.

Answer:
(B)joule.

7

The SI unit of measurement for heat is the

(A) watt.

(B) joule.

(C) kelvin.

(D) kilowatt hour.

Answer:
(B)joule.

8

The SI unit of measurement for power is the

(A) watt.

(B) joule.

(C) kelvin.

(D) kilowatt hour.

Answer:
(A)watt.

9

The rate at which energy is dissipated through heat transfer in

an a.c. circuit is termed

(A
) apparent power'.

(B
) true power'.

(C
) reactive power'.

Answer:

(B
) true power'.

10

The above quantity is traditionally expressed in

(A
) watts.

(B
) volt amperes.

(C
) reactive volt amperes.

Answer:

(A)watts.

11

The rate at which energy is alternately stored in a circuit's electric or magnetic field and returned to the supply, every quarter-cycle, is termed

(A
) apparent power'.

(B
) true power'.

(C
) reactive power'.

Answer:

(C
) reactive power'.

12

The above quantity is traditionally expressed in

(A
) watts.

(B
) volt amperes.

(C
) reactive volt amperes.

Answer:

(C
) reactive volt amperes.

13

The combination of the two quantities, described above, is termed the _____ of an a.c. circuit.

(A) apparent power'.

(B) true power'.

(C) reactive power'.

Answer:

(A) apparent power'.

14

The above quantity is traditionally expressed in

(A) volt amperes.

(B) reactive volt amperes.

(C) watts.

Answer:

(A) volt amperes.

15

The apparent power of an a.c. load is the _____ of its true power and reactive power.

(A) algebraic sum.

(B) algebraic difference.

(C) vector sum.

(D) vector difference.

Answer:

(C) vector sum.

16

To convert a voltage phasor diagram to a power diagram,

(A) divide the voltage phasors by the reference phasor.

(B) multiply the voltage phasors by the reference phasor.

(C) add the reference phasor to the voltage phasors.

(D) subtract the reference phasor from the voltage phasors.

Answer:

(B) multiply the voltage phasors by the reference phasor.

17

The term, 'power factor', is the

(A) cosine of the phase angle.

(B) ratio of true power to apparent power.

(C) ratio of resistance to impedance.

(D) any of the above

Answer:

(A) cosine of the phase angle.

18

The term, 'leading' power factor, describes a circuit in which the

(A) load current leads the supply voltage.

(B) load current lags the supply voltage.

(C) load current is in phase with the supply current.

Answer:

(A) load current leads the supply voltage.