

1. The frequency of DC current

- (a) Equal to voltage magnitude
- (b) 0
- (c) Double of AC frequency
- (d) 50 HZ

Ans : b

2. The current flowing in a purely inductive circuit of 30 mH on application of 230 V, 50 Hz single phase supply is 24.4 A. If the frequency of the applied voltage is increased to 100 Hz the current flowing in the same circuit will be

- (a) 24.4 A
- (b) 48.8 A
- (c) 12.2 A
- (d) 6.1 A

Ans : c

3. Find the total resistance when two 3 Ohm resistances are connected in parallel.

- (a) 1.11 ohms
- (b) 1.5 ohms
- (c) 0.707 ohms
- (d) 1.23 ohms

Ans : b

4. Voltage drop in a resistance given by

- (a) mmf/reluctance
- (b) IR
- (c) I/R
- (d) VI

Ans : b

5. Off-line converter, SMPS has

- a. AC input and dc output
- b. DC input and dc output
- c. AC input and ac output
- d. None

Ans. a

6. Filter circuits are constructed by means of

- a. Diode
- b. Resistors
- c. Transformers
- d. Capacitor and inductors

Ans. d

7. Resistance of the diode is decreased when

- a. Forward biased
- b. Reverse biased
- c. Both forward and reverse biased
- d. Either a or b

Ans. a

8. In earlier time is used for voltage regulation.

- a. Diode
- b. Transistors
- c. Vacuum tubes and glow bulbs
- d. SMPS

Ans. c

9. is the equipment used during power failure.

- a. Rectifier
- b. Voltage regulators
- c. UPS
- d. SMPS

Ans. c

10. Peak factor of the sine wave is equal to

- (a) 0.901
- (b) 1.414
- (c) 1.1
- (d) 1.11

Ans :b

11. The amplitude of current of full wave rectified sinusoidal wave is 80 A, its average value will be

- (a) 25.44A
- (b) 80A
- (c) 40A
- (d) 56.56A

Ans : a

12. Find the total current supplied to the lamp rated 100w .when supply voltage is 200 v.

- (a) 1.75A
- (b) 2A
- (c) 0.5A
- (d) 1A

(e) Ans : c

13. The power factor of a inductive circuit is

- (a) Lagging
- (b) Leading
- (c) Zero lagging
- (d) Unity

Ans : a

14. The power factor of a purely capacitive circuit is always

- (a) Lagging
- (b) Leading
- (c) Unity
- (d) Zero lagging

Ans : b

15. The overall circuit power factor of a RLC series circuit is found to be 0.898 lagging. The nature of the resultant circuit is

- (a) Resistive
- (b) Inductive
- (c) Capacitive
- (d) None of these

Ans : b

16. The maximum, rms and average value of a periodic current wave form is 100 A, 64.42A and 57.5A, respectively. The peak factor of this wave is

- (a) 0.644
- (b) 1.552
- (c) 1.12

(d) None of these

Ans : b

17. In a parallel resistance circuit

- (a) Power is same in all resistance
- (b) Current is same in all resistance
- (c) Voltage is same in all resistance
- (d) Resistances are same

Ans : c

18. Find the total resistance when 2 Ohm and 4 Ohm resistances are in parallel.

- (a) 1.33 Ohms
- (b) 0.33 Ohms
- (c) 2.33 Ohms
- (d) 1 Ohm

Ans : a

19. Expression for mmf in terms of field strength is

- (a) HI
- (b) H/I
- (c) HL
- (d) H/L

Ans : c

20. is the property of magnetic which opposes the flow of flux through it.

- (a) Resistance
- (b) MMF
- (c) Reluctance
- (d) emf

Ans : c

21. is the property of electrical conductor which oppose the flow of current through it

- (a) Reluctance
- (b) emf
- (c) mmf
- (d) Resistance

Ans : d

22. Reluctance is expressed in

- (a) Ampere Weber
- (b) Ohm
- (c) Ampere/Weber
- (d) Volt/Ampere

Ans : c

23. Reciprocal of reluctance is termed as

- (a) Conductance
- (b) Permenance
- (c) Permeability
- (d) None of these

Ans : b

24. Ohm's law for electric circuit will be

- (a) $\text{emf} = \text{current}/\text{resistance}$
- (b) $\text{emf} = \text{current} \times \text{resistance}$
- (c) $\text{emf} = \text{resistance}/\text{current}$
- (d) $\text{emf} = 1/(\text{resistance} \times \text{current})$

Ans : b

25. Ohm's law for magnetic circuit will be

- (a) $\text{mmf} = \text{flux} / \text{resistance}$
- (b) $\text{flux} = \text{mmf} \times \text{resistance}$
- (c) $\text{reluctance} = \text{mmf} / \text{flux}$
- (d) $\text{Resistance} = \text{mmf} \times \text{flux}$

Ans : c