

Duration: 120 Mins

Total Marks: 30

ID: ITISKILL31078T

Student Name: _____ Roll No: _____

1. What is the formula for induced emf?

A) $B^2 \sin \theta$ volts	A) Refrigerator
B) $BLV \sin \theta$ volts	B) Motor
C) $B^2 \sin \theta$ volts	C) Generator
D) $BL \sin \theta$ volts	D) Transformer

2. Which is same in series connection of resistors in a circuit?

A) Current	B) Voltage
C) Power	D) Resistance

3. What is the resistance of an electric iron if the rating of electric iron is 220 V and 500 watts?

A) 96.8 ohms	B) 94.8 ohms
C) 97.8 ohms	D) 95.8 ohms

4. Which is the unit of current?

A) Volt	B) Ampere
C) Ohm	D) Watt

5. Which machine converts mechanical energy into electrical energy?

A) Iron box	B) Battery
C) Generator	D) Heater

6. What is the current flow in the bulb? $P = 550$ watts
 $R = 22$ Ohms $I =$ _____ Amps

A) 2 Amps	B) 3 Amps
C) 4 Amps	D) 5 Amps

7. What is the flow of electrons in any conductor?

A) Voltage	B) Current
C) Power	D) Resistance

8. What is the current? $R = 50$ Ohms $V = 220$ Volts
 $I =$ _____ Amps

A) 4.1 Amps	B) 4.2 Amps
C) 4.4 Amps	D) 4.3 Amps

9. Which is the example for statically induced emf?

A) Refrigerator	B) Motor
C) Generator	D) Transformer

10. What is the voltage of the immersion heater? $P = 500$ watts
 $I = 2.27$ Amps $V =$ _____ Volts

A) 200.3 volts	B) 230.3 volts
C) 220.3 volts	D) 210.3 volts

11. Which is mineral insulator

A) Quartz	B) Glass
C) Porcelain	D) Mica

12. Which statement is correct according to ohm's law?

A) $I = 1/V$	B) $I = V/R$
C) $I = R$	D) $I = R/V$

13. How much power does it consume if an electric heater draws a current of 10 amps at 200 volts?

A) 2010 watts	B) 2000 watts
C) 2030 watts	D) 2020 watts

14. What is the total resistance if two resistances of 4 ohms and 6 ohms are connected in parallel?

A) 5	B) 4
C) 2.4	D) 10

15. Which is very good conductor?

A) Steel	B) Copper
C) Cast iron	D) Wrought iron

16. What does EMF stand for?

A) Electro Motive Force	B) Electro Magnetic Force
C) Electronic Magnetic Force	D) Electromated Force

17. Which law states that at constant temperature the current passing through a closed circuit is directly proportional to the potential difference and inversely proportional to the resistance?

A) Hooke's law	B) Newton's law
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C) Lenz's law

D) Ohm's law

18. What is the power if an emf of one volt causes a current flow of 1ampere?

A) 1 HP

B) 1 watt

C) 1 kilowatt

D) 1 Kilowatt hour

19. Which is equal to electric power?

A) IRA

B) I^2R watts

C) R^2I watts

D) RI

20. Which property of a substance is opposing the flow of electric current?

A) Resistance

B) Voltage

C) EMF

D) Current

21. What is the filament resistance if a 6 volt bulb draws a current of 0.5 Amps?

A) 3 W

B) 12 W

C) 10 W

D) 1.2 W

22. What is the unit of intensity of magnetic field?

A) wb/m

B) m/wb

C) Hertz

D) Coloumb

23. Which is the example for dynamically induced Emf?

A) Generator

B) Car

C) Motor

D) Motor bike

24. What is the resistance? $I = 11.5$ Amps $V = 380$

Volts $R =$ _____ Ohms

A) 13 ohms

B) 43 ohms

C) 33 ohms

D) 23 ohms

25. Which law states about electromagnetic induction?

A) Ohm's law

B) Lenz's law

C) Hooke's law

D) Faraday's law

26. Which is the unit electrical power?

A) Watts

B) Ohms

C) Volts

D) Ampere

27. What is the total resistance if three resistances of 3 ohms, 9 ohms and 5 ohms are connected in series?

A) $1/17$ ohms

B) 17 ohms

C) 11 ohms

D) 7 ohm

28. Which is the unit of resistance?

A) Ohm

B) Ampere

C) Watt

D) Volt

29. What is the voltage? $R = 250$ Ohms $I = 0.44$ Amps $V =$ _____ Volts

A) 105 Volts

B) 110 Volts

C) 100 Volts

D) 108 Volts

30. How much watt second in 1 watt hour?

A) 1000 watt sec

B) 4000 watt sec

C) 2000 watt sec

D) 3600 watt sec