

Student Name: _____ Roll No: _____

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

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

2. Which is mineral insulator

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

3. Which machine converts mechanical energy into electrical energy?

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

4. What is the length of arc of a sector, whose radius is 15 cm and angle is 40 Degree?

- A) 9.8 cm
B) 10.60 cm
C) 9.75 cm
D) 10.4 cm

5. What is the area of the circle, whose diameter is 50 cm?

- A) 1960 cm^2
B) 1950 cm^2
C) 1900 cm^2
D) 1962.5 cm^2

6. What is the length of arc of the sector whose radius is 15 cm and the intended angle is 30 Degree?

- A) 7.85 cm
B) 7.25 cm
C) 6.75 cm
D) 6.85 cm

7. What is the resistance? $I = 11.5 \text{ Amps}$ $V = 380 \text{ Volts}$ $R = \text{_____ Ohms}$

- A) 33 ohms
B) 23 ohms
C) 13 ohms
D) 43 ohms

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

- A) Voltage
B) Current
C) Resistance
D) EMF

9. What is the radius of the circle if the angle of sector is 90 Degree and the area of the circle is 196 cm^2 ?

- A) 15 cm
B) 15.77 cm
C) 14.95 cm
D) 14.85 cm

10. What is the radius of the circle, whose circumference is 440 cm?

- A) 70 cm
B) 72.2 cm
C) 71.5 cm
D) 70.5 cm

11. 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) Lenz's law
B) Hooke's law
C) Ohm's law
D) Newton's law

12. What is the area of the sector, if the diameter is 12 cm and the angle is 60 Degree?

- A) 18.0 cm^2
B) 19.00 cm^2
C) 17.75 cm^2
D) 18.84 cm^2

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

- A) 7 ohm
B) 17 ohms
C) $1/17$ ohms
D) 11 ohms

14. Which is very good conductor?

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

15. Which is the unit of resistance?

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

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

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

17. Which is the unit of current?

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

18. What is the value of $14x+3y+25x+2y$?

- A) $17x + 27y$
B) $16x + 28y$

C) $39x + 5y$

D) $44xy$

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

A) Power

B) Voltage

C) Current

D) Resistance

20. What is the name of the region of a circle between any two point on the circumference?

A) Chord

B) Sector

C) Arc

D) Segment
