

Duration: 60 Mins**Total Marks: 20****Q.ID: ITISKILL5085VR**

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

- A) Sector
B) Segment
C) Arc
D) Chord

Answer: B) Segment

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

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

Answer: A) 10.4 cm

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

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

Answer: A) 2.4

4. What is the resistance? $I = 11.5$ Amps $V = 380$ Volts $R = \underline{\hspace{2cm}}$ Ohms

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

Answer: D) 33 ohms

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

- A) $39x + 5y$
B) $16x + 28y$
C) $44xy$
D) $17x + 27y$

Answer: A) $39x + 5y$

6. Which machine converts mechanical energy into electrical energy?

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

Answer: A) Generator

7. 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

Answer: B) 17 ohms

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

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

Answer: D) Current

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

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

Answer: D) 1962.5 cm^2

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

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

Answer: B) 18.84 cm^2

11. Which is very good conductor?

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

Answer: B) Copper

12. Which is the unit of resistance?

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

Answer: C) Ohm

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

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

Answer: C) Current

14. Which is the unit of current?

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

Answer: C) Ampere

15. 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

Answer: A) 7.85 cm

16. Which is mineral insulator

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

Answer: D) Mica

17. 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) 14.95 cm

B) 15.77 cm

C) 14.85 cm

D) 15 cm

Answer: B) 15.77 cm

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

A) Current

B) Resistance

C) EMF

D) Voltage

Answer: B) Resistance

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

A) 70.5 cm

B) 70 cm

C) 71.5 cm

D) 72.2 cm

Answer: B) 70 cm

20. 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) Ohm's law

B) Lenz's law

C) Hooke's law

D) Newton's law

Answer: A) Ohm's law