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Score: 16/20 (80.00%)

Code: 6533

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

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

2. 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 (Correct)** B) 7.25 cm
C) 6.75 cm D) 6.85 cm

3. 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) 17.75 cm^2
C) 19.00 cm^2 D) **18.84 cm^2 (Correct)**

4. 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) **15.77 cm (Correct)** B) 15 cm
C) 14.85 cm D) 14.95 cm

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

- A) 9.75 cm B) 9.8 cm
C) 10.60 cm D) **10.4 cm (Correct)**

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

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

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

- A) Arc (Incorrect) B) **Segment**
C) Sector D) Chord

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

- A) 71.5 cm B) **70 cm**
C) 70.5 cm (Incorrect) D) 72.2 cm

9. Which machine converts mechanical energy into electrical energy?

- A) Battery B) **Generator (Correct)**

C) Heater

D) Iron box

10. Which is the unit of current?

- A) **Ampere (Correct)** B) Volt
C) Ohm D) Watt

11. Which is the unit of resistance?

- A) Ampere B) Volt
C) **Ohm** D) Watt (Incorrect)

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

- A) Voltage B) **Current (Correct)**
C) Resistance D) Power

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

- A) Current B) Voltage
C) **Resistance (Correct)** D) EMF

14. Which is very good conductor?

- A) **Copper (Correct)** B) Cast iron
C) Wrought iron D) Steel

15. Which is mineral insulator

- A) Glass B) Quartz (Incorrect)
C) **Mica** D) Porcelain

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

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

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

- A) 10 B) **2.4 (Correct)**
C) 5 D) 4

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

- A) **Current (Correct)** B) Voltage
C) Resistance D) Power

19. 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 (Correct)** B) Lenz's law
C) Newton's law D) Hooke's law
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20. What is the resistance?

$I = 11.5$ Amps

$V = 380$ Volts

$R = \underline{\hspace{2cm}}$ Ohms

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