Physicsaholics

DPP – 9 (Current Electricity)

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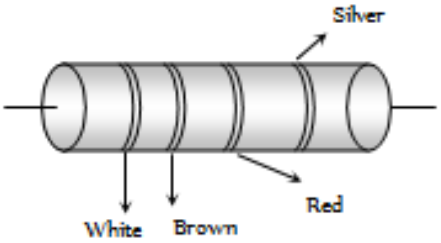
Q 1. In the figure a carbon resistor has bands of different colours on its body as mentioned in the figure. The value of the resistance is



(a) 2.2 $k\,\Omega$ (c) 5.6 $k\,\Omega$
(b) 3.3 $k\,\Omega$ (d) 9.1 $k\Omega$

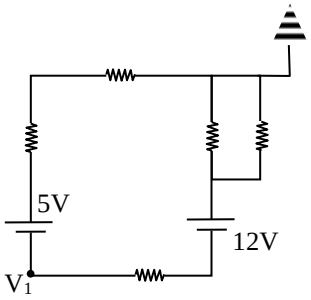
Q 2. The colour sequence in a carbon resistor is red, brown, orange and silver. The resistance of the resistor is

(a) $21 \times 10^3 \pm 10\%$ (b) $23\times10^1\pm10$
(c) $21 \times 10^3 \pm 5\%$ (d) $12 \times 10^3 \pm 5\%$

Q 3. What is the color code of $33k\Omega \pm 5\%$?
(a) Orange, red, red, gold
(b) Red, red, red, silver
(c) orange, orange, orange, gold
(d) Yellow, yellow, red, silver

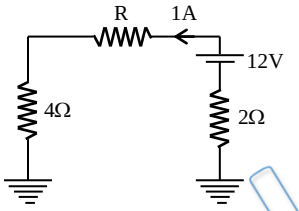
Q 4. A resistor has only three bands and all bands are red. Find minimum resistance of resistor ?
(a) 2200 ohm
(b) 3300 ohm
(c) 1100 ohm
(d) 1760 ohm

Q 5. In the circuit shown, each resistance is 2ohm. The potential V_1 as indicated in the circuit, is equal to –



(a) 11 V (b) – 11V
(c) 9 V (d) – 9 V

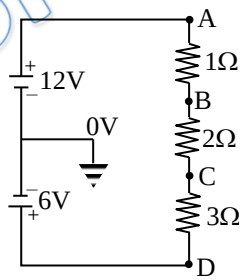
Q 6. In the circuit shown in figure the value of R is-



(a) 8 ohm (b) 10 ohm
(c) 6 ohm (d) 9 ohm

Q 7. What is the resistance of a carbon resistance which has bands of colours brown, black and brown
(a)100 Ω (b)1000 Ω
(c)10 Ω (d)1 Ω

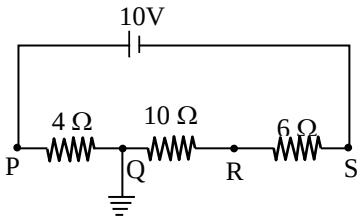
Q 8. In the circuit diagram shown in Figure, the potentials of the points B, C and D are respectively-

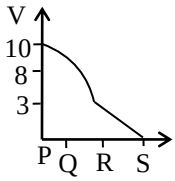


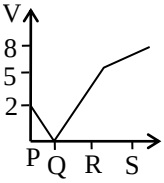
(a) 12V, 10V, 6V (c) 11V, 9V, 0V
(b) 11V, 9V, 6V (d) 12V, 10V, 0V

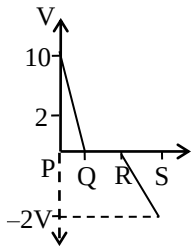
Q 9. A 24 volt battery of internal resistance of 4ohm is connected to a variable resistance. The rate of heat production in the resistor is maximum when current in the circuit is –
(a) 2 A (c) 4 A
(b) 3 A (d) 6 A

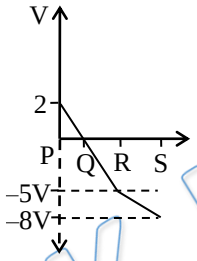
Q 10. The correct graph representation of potential along the branch PQRS is -



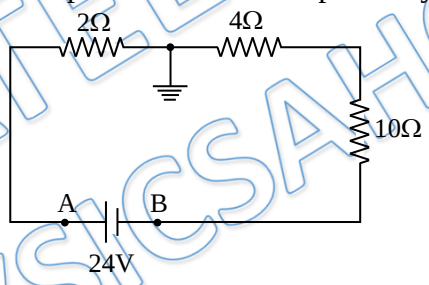
(A)


(B)


(C)


(D)


Q 11. In given circuit potential of point A & B are respectively -



(a) + 24 V, zero
(b) + 3V, – 21 V
(c) + 24 V, – 24 V
(d) – 3V, + 21V

Answer Key

Q.1 d	**Q.2 a**	**Q.3 c**	**Q.4 d**	**Q.5 d**
Q.6 c	**Q.7 a**	**Q.8 b**	**Q.9 b**	**Q.10 d**
Q.11 b				