

CBSE Class 12 Physics Answer Key 2026 for 55/4/2

Q) A wire is gradually stretched to make it 100% longer. Its resistance will be increased by?

- a) 100%
- b) 200%
- c) 300%
- d) 400%

Correct Answer: c) 300%

Q) A closely wound long solenoid of self-inductance L is cut into two identical solenoids. The value of the self-inductance of each small solenoid will be?

- a) $L/2$
- b) $2L$
- c) $3L$
- d) $4L$

Correct Answer: a) $L/2$

Q) Which of the following characteristics of electrons determines the current in the conductor?

- a) Drift velocity only
- b) Thermal velocity only
- c) Both
- d) Neither

Correct Answer: a) Drift velocity only

Q) Paschen series in the spectrum of the Hydrogen atom lies in?

- a) infrared region
- b) ultraviolet region
- c) visible region



d) partly in the ultraviolet region and partly in the visible region

Correct Answer: a) Infrared region

Q) The kinetic energy of a charged particle is increased to 4 times its initial value. The de Broglie wavelength associated with the particle will be?

a) increase by 100% of its initial value

b) increase by 50% of its initial value

c) decrease by 25% of its initial value

d) decrease by 50% of its initial value

Correct Answer: d) decrease by 50% of its initial value

Q) In a reverse-biased p-n junction diode, the applied voltage mostly drops across?

a) p region

b) n region

c) depletion region

d) the diode

Correct Answer: c) depletion region

Q) An AC voltage is given as $v = 14\sin(314t)V$. The average and the effective value of the Voltage (in V) over a cycle are respectively?

a) 14 and 7

b) 10 and 14

c) 0 and 10

d) 10 and 0

Correct Answer: c) 0 and 10

Q) In an experiment on photoelectric emission, the intensity of incident radiation is halved, keeping its frequency constant. As a result?

a) cutoff potential will increase.

b) maximum kinetic energy of photoelectrons will remain the same.



c) photocurrent will increase.

d) cutoff potential will decrease.

Correct Answer: b) maximum kinetic energy of photoelectrons will remain the same.

