



SAMPLE PAPER
Class XI

Q1. If the constant of gravitation (G), Planck's constant (h) and the velocity of light (c) be chosen as fundamental units. The dimension of the radius of gyration is

- 1) $h^{1/2} c^{3/2} G^{1/2}$
- 2) $h^{1/2} c^{-3/2} G^{-1/2}$
- 3) $h^{1/2} c^{-3/2} G^{1/2}$
- 4) $h^{-1/2} c^{-3/2} G^{1/2}$

Q2. The mass of an electron is 9.1×10^{-31} kg. If its K.E. is 3.0×10^{-25} J, calculate its wavelength.

- 1) 8321Å
- 2) 6500Å
- 3) 8067Å
- 4) 8967Å

Q3. What mass of $H_2(g)$ is needed to reduce 192gm. of MoO_3 to metal ? [At. wt. of Mo = 96]

- 1) 8gm
- 2) 16gm
- 3) 32gm
- 4) None of these

Q4. One fermi is

- 1) 10^{-10} cm
- 2) 10^{-12} cm
- 3) 10^{-14} cm
- 4) 10^{-13} cm

Q5. The number of significant figures in 60.0001 is

- 1) 6
- 2) 5
- 3) 3
- 4) 2

Answers: Q1. - 3, Q2. - 4, Q3. - 1, Q4. - 4, Q5. - 1