

6. What is the maximum number of electrons present in a ground state chromium atom with magnetic quantum number (m_l) = 0?
 1) 10 2) 2 3) 12 4) 13 5) 14
7. The maximum number of electrons possible for quantum numbers, $n = 3$, $m_l = -1$ and $m_s = -\frac{1}{2}$
 1) 1 2) 2 3) 3 4) 4 5) 5
8. A gas absorbs energy of a photon of ultraviolet radiation having 300 nm wavelength and releases it as an energy of two photons. The wavelength of one photon is 760 nm which corresponds to the red light. Wavelength of the other photon is,
 1) 496 nm 2) 300 nm 3) 460 nm 4) 700 nm 5) 760 nm
9. possible quantum number combination of an unpaired valence electron of $_{47}\text{Ag}$ atom in its ground state is,
 1. 5, 0, 0, $+\frac{1}{2}$ 2. 4, 0, 0, $+\frac{1}{2}$ 3. 5, 1, +1, $+\frac{1}{2}$
 4. 5, 1, 0, $+\frac{1}{2}$ 5. 4, 2, 0, $+\frac{1}{2}$
10. Increasing order of first ionization energy of elements P, Na, Mg, N and Al is,
 1) $\text{Al} < \text{Na} < \text{Mg} < \text{P} < \text{N}$
 2) $\text{Na} < \text{Al} < \text{Mg} < \text{P} < \text{N}$
 3) $\text{Na} < \text{Mg} < \text{Al} < \text{N} < \text{P}$
 4) $\text{N} < \text{Na} < \text{Al} < \text{Mg} < \text{P}$
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