

16. The "spin-only" magnetic moment [in units of Bohr magneton] of  $\text{Ni}^{2+}$  in aqueous solution would be (Atomic number of Ni = 28) (2006)

1) 2.84    2) 4.9    3) 0    4) 1.73

Ans.

(1)  $\mu = \sqrt{n(n+2)}$ , where  $\text{Ni}^{2+}$  has  $n = 2$

$$\mu = \sqrt{2(2+2)} = 2.838 \text{ BM}$$