

## f-BLOCK ELEMENTS, NUCLEAR CHEMISTRY CO-ORDINATION COMPOUNDS

Std. XII  
CHEMISTRYTime: 1½  
Max.Marks: 75

## PART - I

Choose the correct answer

(15 × 1 = 15)

- The most common oxidation state of lanthanides is  
a +2                      b +1                      c +3                      d +4
- The Lanthanide contraction is responsible for the fact that  
a Zn and Y have about same radius  
b Zr and Nb have same oxidation state  
c Zr and Hf have about the same radius  
d Zr and Zn have the same oxidation state
- \_\_\_\_\_ is used in gas lamp material  
a MnO<sub>2</sub>    b CeO<sub>2</sub>  
c N<sub>2</sub>O<sub>5</sub>    d Fe<sub>2</sub>O<sub>3</sub>
- Alloys of Lanthanides are called as  
a Metalloids    b Actinides  
c Mish metals    d Amalgams
- \_\_\_\_\_ form oxocations  
a Lanthanides    b Actinides  
c Noble gases    d Alkali metals
- An example of an ambidentate ligand is  
a CN<sup>-</sup>    b NO<sub>2</sub><sup>-</sup>  
c Cl<sup>-</sup>    d I<sup>-</sup>
- Paramagnetic moment is expressed in  
a Debye unit                      b BM                      c KJoule                      d ergs
- The oxidation number of Nickel in the complex [Ni(CO)<sub>4</sub>] is  
a Four                      b Two                      c One                      d Zero
- [FeF<sub>6</sub>]<sup>4-</sup> is paramagnetic because  
a F<sup>-</sup> is a weaker ligand                      b F<sup>-</sup> is a strong ligand  
c F<sup>-</sup> is a chelating ligand                      d F<sup>-</sup> is a flexidentate ligand
- In [Fe<sup>II</sup>(CN)<sub>6</sub>]<sup>4-</sup>, the central metal ion is  
a Fe                      b Fe<sup>+2</sup>                      c Fe<sup>+3</sup>                      d CN<sup>-</sup>

