

- Complete the following table.

Marks
6

Formula	Oxidation state of transition metal	Coordination number of transition metal	Number of <i>d</i> -electrons in transition metal	Species formed upon dissolving in water
$\text{Na}_2[\text{Ni}(\text{CN})_4]$	II	4	8	$\text{Na}^+(\text{aq})$, $[\text{Ni}(\text{CN})_4]^{2-}(\text{aq})$
$[\text{Cr}(\text{NH}_3)_5\text{Cl}]\text{Cl}_2$	III	6	3	$[\text{Cr}(\text{NH}_3)_5\text{Cl}]^{2+}(\text{aq})$, $\text{Cl}^-(\text{aq})$
$[\text{Cu}(\text{en})_3]\text{Br}_2$	II	6	9	$[\text{Cu}(\text{en})_3]^{2+}(\text{aq})$, $\text{Br}^-(\text{aq})$

en = ethylenediamine = $\text{NH}_2\text{CH}_2\text{CH}_2\text{NH}_2$