

## Loose Sheet for Question 21

Table 21.1

|   |   |                             |
|---|---|-----------------------------|
| $\text{Zn}^{2+}(\text{aq}) + 2\text{e}^{-}$   | $\rightleftharpoons \text{Zn}(\text{s})$  | $E^{\circ} = -0.76\text{V}$ |
| $\text{Cr}^{3+}(\text{aq}) + \text{e}^{-}$  | $\rightleftharpoons \text{Cr}^{2+}(\text{aq})$                                  | $E^{\circ} = -0.42\text{V}$ |
| $\text{Ni}^{2+}(\text{aq}) + 2\text{e}^{-}$   | $\rightleftharpoons \text{Ni}(\text{s})$  | $E^{\circ} = -0.25\text{V}$ |
| $\text{I}_2(\text{aq}) + 2\text{e}^{-}$   | $\rightleftharpoons 2\text{I}^{-}(\text{aq})$                                   | $E^{\circ} = +0.54\text{V}$ |
| $\text{Fe}^{3+}(\text{aq}) + \text{e}^{-}$  | $\rightleftharpoons \text{Fe}^{2+}(\text{aq})$                                  | $E^{\circ} = +0.77\text{V}$ |
| $\text{Cr}_2\text{O}_7^{2-}(\text{aq}) + 14\text{H}^{+}(\text{aq}) + 6\text{e}^{-}$ | $\rightleftharpoons 2\text{Cr}^{3+}(\text{aq}) + 7\text{H}_2\text{O}(\text{l})$ | $E^{\circ} = +1.33\text{V}$ |
| $\text{H}_2\text{O}_2(\text{aq}) + 2\text{H}^{+}(\text{aq}) + 2\text{e}^{-}$        | $\rightleftharpoons 2\text{H}_2\text{O}(\text{l})$                              | $E^{\circ} = +1.78\text{V}$ |

