2

## Question 27 (2 marks)

The diagram shows a particular cell with relevant half equations.

Zn
Insulation
KOH
HgO, Hg

$$\operatorname{Zn}(s) + 2\operatorname{OH}^-(aq) \rightarrow \operatorname{ZnO}(s) + \operatorname{H}_2\operatorname{O}(l) + 2\operatorname{e}^-$$
  
 $\operatorname{HgO}(s) + \operatorname{H}_2\operatorname{O}(l) + 2\operatorname{e}^- \rightarrow \operatorname{Hg}(l) + 2\operatorname{OH}^-(aq)$ 

Identify the anode, cathode and electrolyte for this cell.

Zinc anode (Zn )	4.46	
menuny/oxave cathode	HgD/cathode	
electrolyte KOH		
V		••