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.

Anode: Znestand + Lnows	
• •	
Cathodo: Hg Oss t Hg ss. Electrolyte: KOHsnas	•••••
	•••••