Question	Marking Guidance	Mark	Comments
2(a)	$KNO_3(s) \rightarrow K^+(aq) + NO_3^-(aq)$	1	do not allow equations with H_2O allow aq and the word 'water' in equation
2(b)	increase in disorder because solid $\rightarrow$ solution / increase in number of particles / 1 mol (solid) gives 2 mol (ions/particles) / particles are more mobile	1	allow random or chaos instead of disorder penalise if molecules/atoms stated instead of ions allow any reference to increase in number of particles even if number of particles wrong
2(c)	$\Delta G = \Delta H - T\Delta S$ / $T = \Delta H/\Delta S$	1	
	$T = \Delta H/\Delta S = (34.9 \times 1000)/117$	1	also scores M1
	= 298 $\underline{K}$	1	correct answer scores 3, units essential 0.298 scores M1 only
2(d)(i)	positive / increases / $\Delta G > 0$	1	Allow more positive
2(d)(ii)	if ans to (d) (i) positive, dissolving is no longer spontaneous / no longer feasible / potassium nitrate does not dissolve / less soluble if ans to (d) (i) negative, dissolving is spontaneous / feasible / potassium nitrate dissolves / more soluble	1	If no mention of change to ΔG in (d)(i), Mark = 0 for (d)(ii)