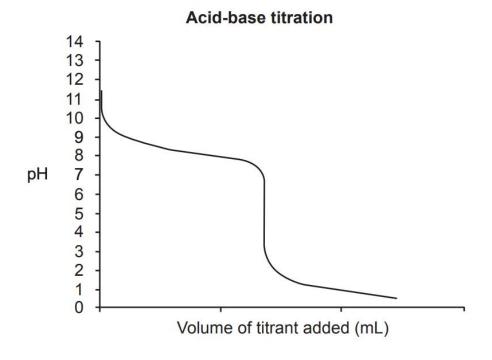
Question 34 (6 marks)

The data below were collected from an acid-base titration.

(a) Label the equivalence point on the titration curve below using an arrow and record the pH value at this point. (2 marks)



pH value at equivalence point: _

(b) Select an indicator from the table below that would be **best** for this titration and justify your choice. (4 marks)

Indicator	Low pH colour	Transition pH range	High pH colour	
Methyl Yellow	red	2.1 – 3.3	yellow	
Bromocresol Green	yellow	3.8 – 5.4	blue	
Bromothymol Blue	yellow	6.0 – 7.6	blue	
Phenolphthalein	colourless	8.3 – 10.0	pink	
Alzarine Yellow R	yellow	10.2 – 12.0	red	

Indicator:			
Justification:			