

Question 29**(10 marks)**

In a beaker 12.00 mL of 0.0334 mol L⁻¹ sulfuric acid solution, H₂SO₄(aq), is added to 32.50 mL of 0.0288 mol L⁻¹ potassium hydroxide solution, KOH(aq).

- (a) Identify the limiting reagent in this reaction. Show **all** workings. (5 marks)

(b) Calculate the final concentration of the excess reagent. Show **all** workings. (3 marks)

(c) Calculate the pH of the final solution. Show **all** workings. (2 marks)
