

Question 26**(11 marks)**

Nitrous acid, HNO_2 , and formic acid, HCOOH , are both monoprotic weak acids.

- (a) Outline the difference between the terms 'monoprotic' and 'polyprotic'. Use equations to illustrate your answer. (4 marks)

- (b) Using the Brønsted-Lowry model of acids and bases, write the ionisation equations for both acids. (2 marks)

Nitrous acid	
Formic acid	

- (c) In the equations above, circle the Brønsted-Lowry bases. (2 marks)

- (d) Using **one** of the two acids as an example, describe how Arrhenius theory of acids and bases differs from Brønsted-Lowry theory. Include an appropriate Arrhenius theory equation in your answer. (3 marks)
