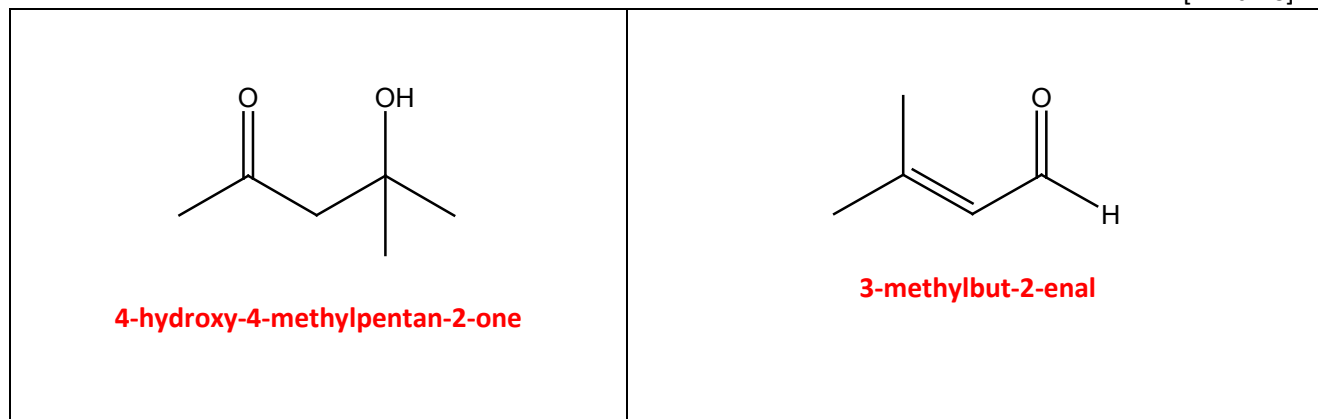


Question 1

[2 + 2 + 2 = 6 marks]

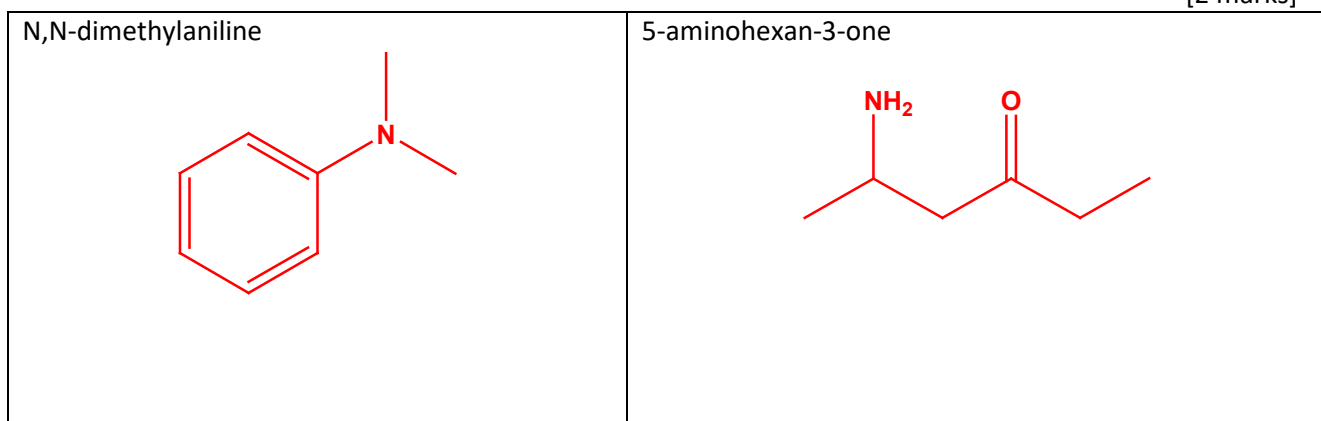
- a. Name these compounds: **1 mark each, all or nothing**

[2 marks]



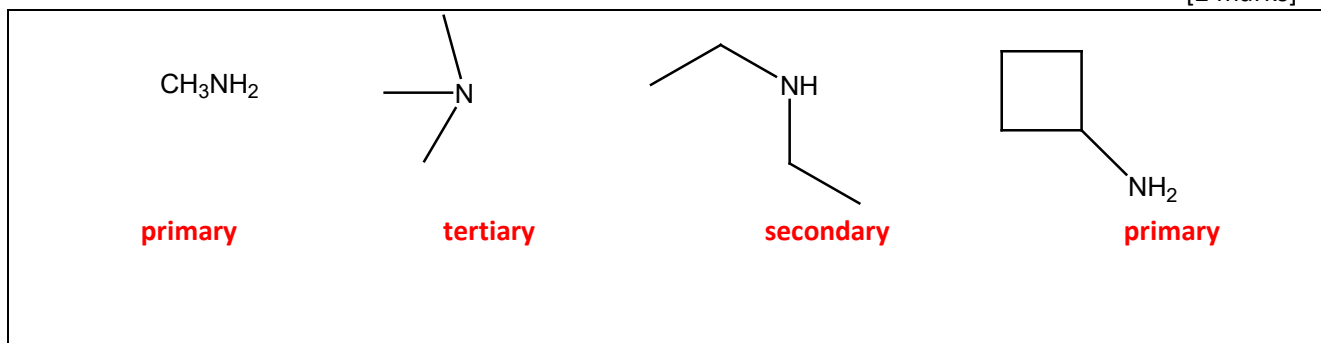
- b. Draw the line structures for these compounds: **1 mark each, all or nothing**

[2 marks]



- c. Label the following compounds as primary, secondary or tertiary. **½ mark each, all or nothing**

[2 marks]



Question 2**[2 + 2 = 4 marks]**

- a) Which will have higher boiling points, aldehydes and ketones or their corresponding alcohols? Explain your answer in terms of intermolecular forces.

[2 marks]

The functional groups in alcohols, aldehydes and ketones are polar and therefore the forces of attraction between molecules include dipole–dipole and dispersion forces. **1 mark**

However, only alcohols can form H–bonds between molecules. Therefore, alcohols have higher boiling points than aldehydes and ketones. **1 mark**

Or similar statements

- b) Give the structure of the organic product formed in the following reactions.

Hint: You do not have to name the compound. **1 mark each**

[2 marks]