

Commentary on candidate evidence

Assessors awarded the candidate evidence contained in this pack the following marks for questions 2(a), 2(b), 2(c), 4(b), 6(c)(ii), 7(a)(iii)B, 7(c)(i), 8(c) and 11(b)(ii) of the 2026 Higher Chemistry Question Paper 2.

Question 2(a)

Candidate 1

The candidate was awarded **1 mark** because they have described the cause of temporary dipoles in terms of uneven distribution of electron. They have not described the attraction between temporary/induced dipoles.

Candidate 2

The candidate was awarded **2 marks** because they have correctly described the formation of temporary dipoles as being due to the uneven distribution of electrons (1 mark). They have also correctly stated that LDFs are caused by the interaction between these temporary dipoles (1 mark).

Candidate 3

The candidate was awarded **0 marks** because they have not described the formation of temporary dipoles nor that LDFs are a result of the attraction between these temporary dipoles.

Candidate 4

The candidate was awarded **2 marks** because they have correctly described the formation of temporary dipoles (the mention of element is accepted) (1 mark). They have also correctly identified that LDFs are the result of the attraction between temporary dipoles in one atom and the induced temporary dipole in another atom (1 mark).

Candidate 5

The candidate was awarded **1 mark** because they have correctly stated that LDFs are caused by attractions between temporary and induced dipoles. They have not described the formation of temporary dipoles.

Question 2(b)

Candidate 1

The candidate was awarded **0 marks** because they have not mentioned LDFs being same strength, or that the two molecules have the same number of electrons.

Candidate 2

The candidate was awarded **0 marks** because they have not mentioned LDFs being same strength, or that the two molecules have the same number of electrons.

Candidate 3

The candidate was awarded **0 marks** because they have not mentioned LDFs being same strength, or that the two molecules have the same number of electrons.

Candidate 4

The candidate was awarded **1 mark** because they have correctly identified that the two molecules have the same number of electrons.

Candidate 5

The candidate was awarded **0 marks** because they have not mentioned LDFs being same strength, or that the two molecules have the same number of electrons.

Question 2(c)

Candidate 1

The candidate was awarded **0 marks** because they have not specifically stated that the bonds in water are polar. They have not mentioned the shape of the molecule or that the dipoles cancel out.

Candidate 2

The candidate was awarded **1 mark** because they have correctly identified that the molecule is not symmetrical and so the 'polarities' do not cancel out. They have also identified that water contains polar bonds, but they have incorrectly described these as hydrogen bonds, which is cancelling.

Candidate 3

The candidate was awarded **0 marks** because they have not specifically stated that the bonds in water are polar. They have not mentioned symmetry or that the dipoles cancel out.

Candidate 4

The candidate was awarded **0 marks** because they have not identified that there are polar bonds. They have described an overall dipole, due to shape, however this is cancelled by the diagram which shows incorrect polarities.

Candidate 5

The candidate was awarded **0 marks** because they have not specifically stated that the bonds in water are polar. They have not mentioned symmetry nor that the dipoles cancel out.

Question 4(b)

Candidate 1

The candidate was awarded **2 marks** because they correctly identified that catalysts provide an alternative pathway for the reaction (1 mark) and that the alternative pathway has a lower activation energy (1 mark).

Candidate 2

The candidate was awarded **1 mark** because they have correctly identified that catalysts lower the activation energy. They have not mentioned that catalysts provide an alternative pathway for the reaction.

Candidate 3

The candidate was awarded **0 marks** because they have incorrectly stated that catalysts **increase** the activation energy. They have not mentioned that catalysts provide an alternative pathway for the reaction.

Candidate 4

The candidate was awarded **0 marks** because they have not mentioned reducing the activation energy nor an alternative pathway.

Candidate 5

The candidate was awarded **2 marks** because they correctly identified that catalysts provide an alternative pathway for the reaction (1 mark) and lower the activation energy (1 mark).

Question 6c(ii)

Candidate 1

The candidate was awarded **2 marks** because they have correctly identified that there is a shape change (1 mark) and that hydrogen bonds are broken (1 mark).

Candidate 2

The candidate was awarded **1 mark** because they have correctly identified that there is a shape change. They have not identified that the bonds broken are intermolecular or hydrogen bonds.

Candidate 3

The candidate was awarded **2 marks** because they have correctly identified that hydrogen bonds are broken (1 mark) and that there is a shape change ('causing enzymes shape to distort') (1 mark).

Candidate 4

The candidate was awarded **1 mark** because they have correctly identified that denaturing involves a change of shape. The mention of breaking hydrogen bonds is cancelled by the reference to 'hydrogen double bonds'.

Candidate 5

The candidate was awarded **1 mark** because they have correctly identified that denaturing involves a change of shape. They have not identified that the bonds broken are intermolecular or hydrogen bonds.

Question 7(a)(iii)(B)

Candidate 1

The candidate was awarded **0 marks** because they have not identified that increasing pressure favours the side with least moles of gas or mentioned any change in rate.

Candidate 2

The candidate was awarded **1 mark** because they have correctly identified that increasing pressure favours the side of the equation with least moles of gas. They have not mentioned the change of rate.

Candidate 3

The candidate was awarded **1 mark** because they have correctly identified that increasing pressure favours side with least moles of gas. They have not mentioned the change of rate.

Candidate 4

The candidate was awarded **1 mark** because they have correctly identified that increasing pressure favours side with less moles of gas. They have not mentioned the change of rate.

Candidate 5

The candidate was awarded **0 marks** because they have not identified that increasing pressure favours the side with least moles of gas or mentioned any change in rate.

Question 7(c)(i)

Candidate 1

The candidate was awarded **1 mark** because they have drawn and labelled aluminium oxide. Collection of gas over water is not drawn correctly as the delivery tube is not under the measuring cylinder.

Candidate 2

The candidate was awarded **2 marks**. Aluminium oxide is present and labelled (1 mark), the extra ceramic wool plugs are considered non-cancelling. Collection of gas over water is also drawn correctly (1 mark).

Candidate 3

The candidate was awarded **0 marks**. Aluminium oxide is not present. Collection of gas over water is drawn incorrectly as the delivery tube is open where it joins the two parts of the diagram.

Candidate 4

The candidate was awarded **1 mark** because they have drawn the collection of gas over water correctly. Aluminium oxide has not been drawn or labelled.

Candidate 5

The candidate was awarded **1 mark** because they drawn and labelled the aluminium oxide. The collection of gas over water has not been drawn correctly.

Question 8(c)

Candidate 1

The candidate was awarded **0 marks** because they have not identified that the bonds broken are covalent bonds.

Candidate 2

The candidate was awarded **0 marks** because they have not identified that the bonds broken are covalent bonds.

Candidate 3

The candidate was awarded **1 mark** because they have correctly identified that covalent bonds are broken.

Candidate 4

The candidate was awarded **0 marks** because they have not identified that the bonds broken are covalent bonds.

Candidate 5

The candidate was awarded **0 marks** because they have not identified that the bonds broken are covalent bonds.

Question 11(b)(ii)

Candidate 1

The candidate was awarded **1 mark** because they have stated that there were no air bubbles as a required step.

Candidate 2

The candidate was awarded **0 marks** because they have not stated that the solution should be drained **into** the scale, i.e. below the 0.00 cm³ mark.

Candidate 3

The candidate was awarded **0 marks** because they have repeated a step that was given in the question.

Candidate 4

The candidate was awarded **0 marks** because they have not stated that the solution should be drained **into** the scale, i.e. below the 0.00 cm³ mark.

Candidate 5

The candidate was awarded **1 mark** because they have correctly identified that the solution should be drained **into** the scale, i.e. below the 0.00 cm³ mark.