

Paper Reference(s) 4CH1/2C
Pearson Edexcel International GCSE (9–1)

Chemistry
UNIT: 4CH1
PAPER: 2C

Tuesday 13 June 2023 – Morning

Diagram Booklet

In the boxes below, write your name, centre number and candidate number.

| | | | | | |
|-------------------------|--|--|--|--|--|
| Surname | | | | | |
| Other names | | | | | |
| Centre Number | | | | | |
| Candidate Number | | | | | |

INSTRUCTIONS

There may be spare copies of some diagrams in case you need them.

**THIS DIAGRAM BOOKLET MUST BE
RETURNED WITH THE QUESTION PAPER
AT THE END OF THE EXAMINATION.**

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Spare Copies

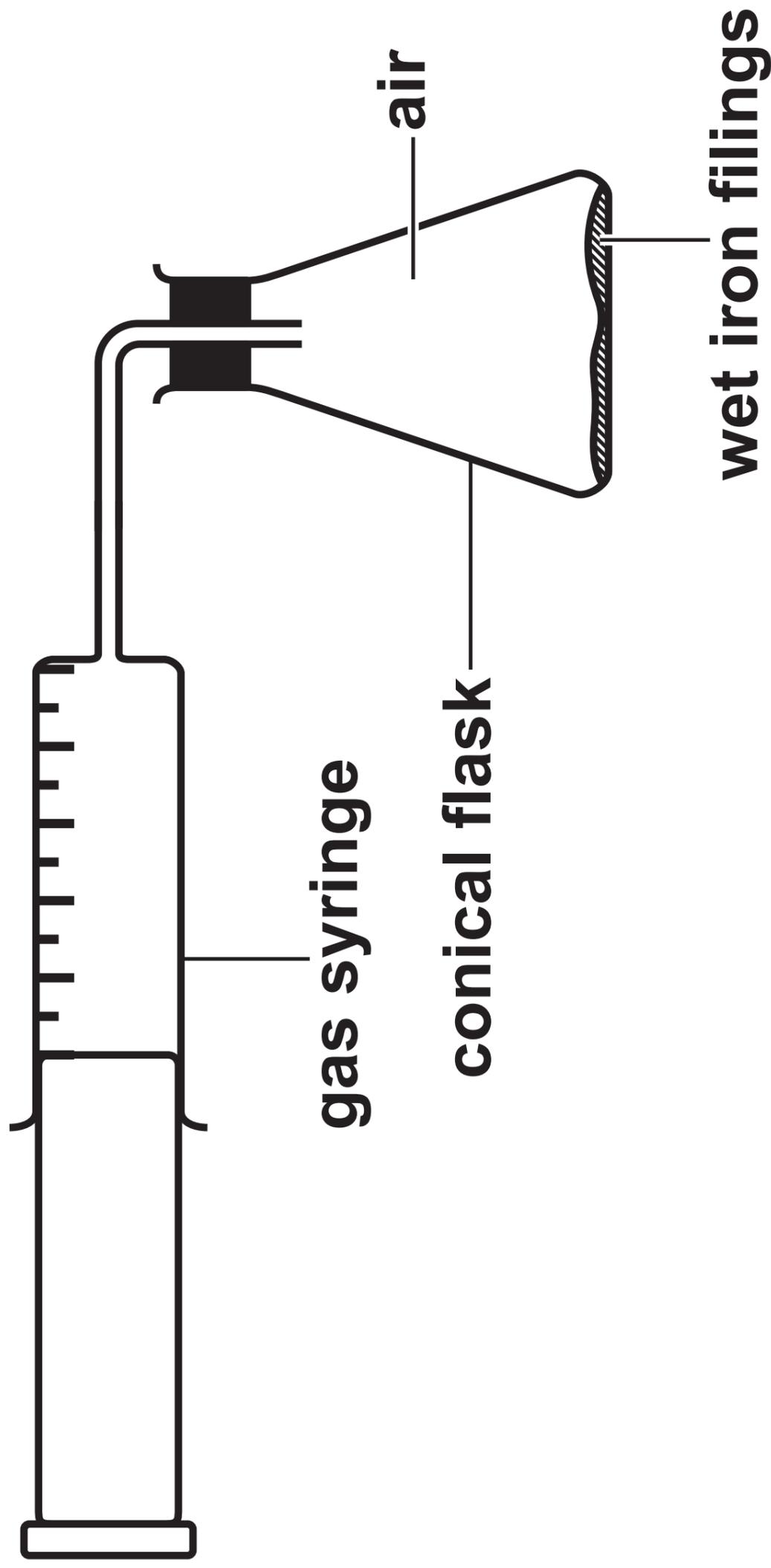
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Question 2(c)

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Question 3(a)

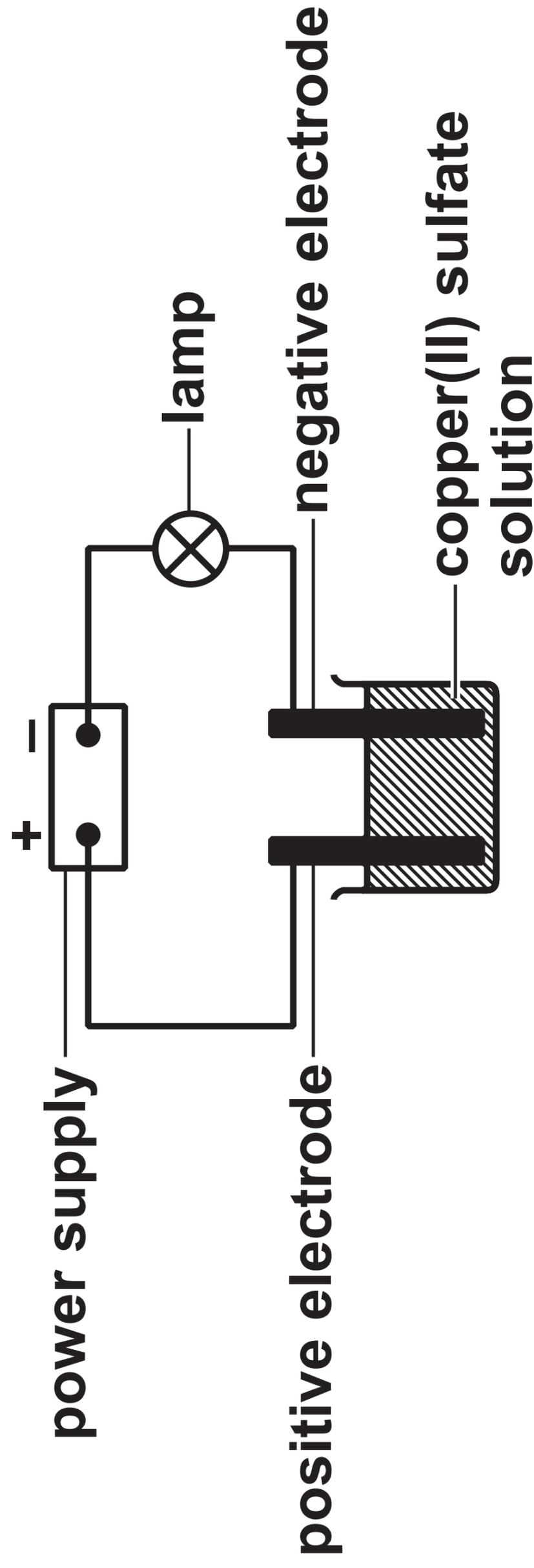
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Question 3(b)

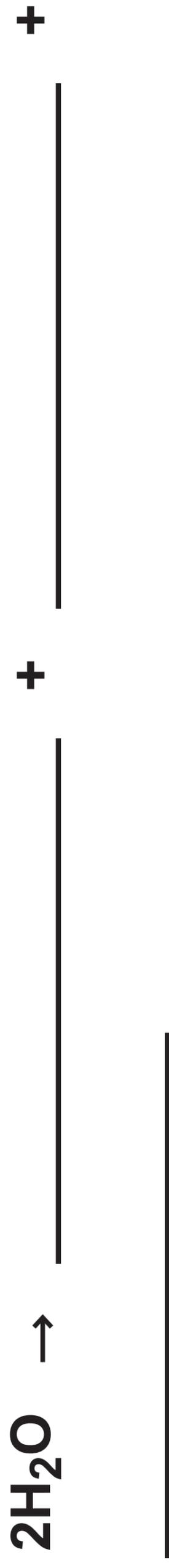
| | Hydration | Fermentation |
|--------------------------------|-------------------------|-------------------------|
| Reagents | ethene and steam | aqueous glucose |
| Catalyst | | enzymes in yeast |
| Temperature in °C | 300 | |
| Pressure in atmospheres | | 1 |
| Rate of process | fast | slow |
| Purity of product | pure | impure |

Question 5

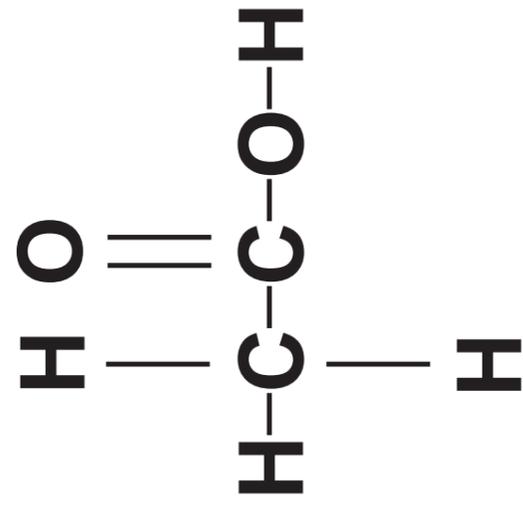


Question 5(d)(ii)

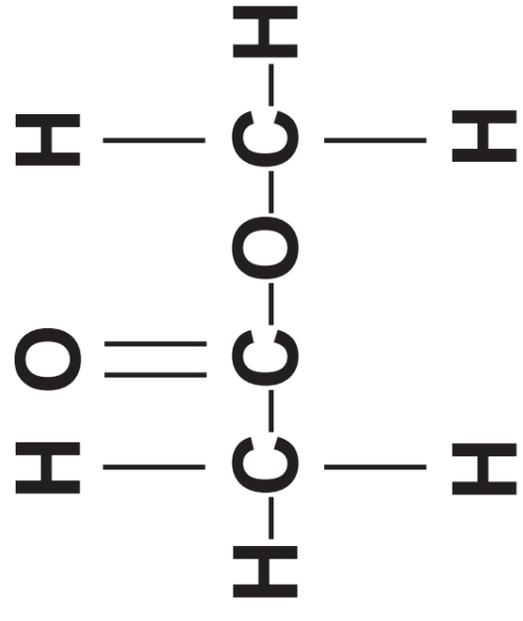
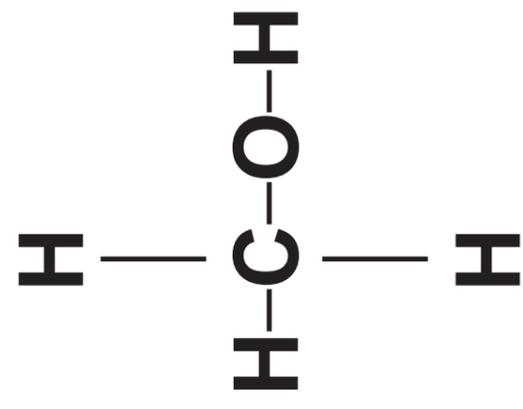
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Question 6



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Question 6(b)

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| Bond | C-H | C-C | C-O | C=O | O-H |
|-------------------------------------|------------|------------|------------|------------|------------|
| Number of bonds in reactants | 6 | 1 | 2 | 1 | 2 |
| Number of bonds in products | 6 | 1 | 2 | 1 | 2 |

Question 3(a)

11



Question 3(b)

| | Hydration | Fermentation |
|--------------------------------|-------------------------|-------------------------|
| Reagents | ethene and steam | aqueous glucose |
| Catalyst | | enzymes in yeast |
| Temperature in °C | 300 | |
| Pressure in atmospheres | | 1 |
| Rate of process | fast | slow |
| Purity of product | pure | impure |

