

GCSE

Science A (4461)

Specification A

CHY1BP, CH1BSF & CH1BSH

Mark Scheme

2009 Examination – June Series

The blank answer sheet for this component can be found at the end of this document.

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GCSE

SCIENCE A (4461)/CHEMISTRY (4421)

Objective Test Answer Key

CHY1BP (Oils, Earth and Atmosphere) June 2009

Foundation Tier

| Question | Key | | | | |
|----------|-----|-------------------|---------------------------------------|--------------|---|
| | A | Atmosphere | | 1 | |
| 0 | В | Core | | 4 | |
| One | C | Crust | | 2 | |
| | D | Mantle | 3 | | |
| | | | | | |
| | A | PTFE | | 2 | |
| Two | В | Nylon | | 3 | |
| 1 WO | C | Polystyrene | | 1 | |
| | D | PET | | 4 | |
| | | | | | |
| | A | It is the gas th | at is a compound | 2 | |
| Three | В | It is the most a | abundant of the noble g | ases. 1 | |
| Timee | C | It is the noble | gas with the lowest boi | ling point 4 | |
| | D | There are 18 c | m ³ of this gas in 100 lit | res of air 3 | |
| | | | | | |
| | A | | arge quantity of energy | 1 | |
| Four | В | is biodegradat | ole | 2 | |
| 1 0 011 | C | is obtained fro | m a vegetable source | 3 | |
| | D | is unsaturated | | 4 | |
| | | | | | |
| | A | Molecule A | | 1 | |
| Five | В | Molecule B | | 4 | |
| | C | Molecule C | | 2 | |
| | D | Molecule D | | 3 | |
| | | | т. | 6 | |
| | | A | В | C | D |
| Six | | 2 | 1 | 2 | 2 |
| Seven | | 3 | 1 | 1 | 2 |
| Eight | | 4 | 2 | 3 | 3 |
| Nine | | 2 | 3 | 1 | 4 |

GCSE SCIENCE A (4461)/CHEMISTRY (4421)

Objective Test Answer Key

CHY1BP (Oils, Earth and Atmosphere) June 2009

Higher Tier

| Question | Key | | | |
|----------|------------------------|-------------------|---|---|
| | A Molecule A | | 1 | |
| One | B Molecule B | | 4 | |
| One | C Molecule C | | 2 | |
| | D Molecule D | | 3 | |
| | | | | |
| | A polymerisati | on | 4 | |
| Two | B thermal deco | omposition | 1 | |
| 1 WO | C unsaturation | | 2 | |
| | D hydration (ac | ddition of water) | 3 | |
| | | | | |
| | A | В | C | D |
| Three | 4 | 2 | 3 | 3 |
| Four | 2 | 3 | 1 | 4 |
| Five | 4 | 3 | 1 | 1 |
| Six | 4 | * | 2 | 4 |
| Seven | 2 | 1 | 1 | 3 |
| Eight | 1 | 4 | 4 | 3 |
| Nine | 2 | 2 | 2 | 4 |

^{*} This question has been removed



Unit: CHY1BP CHEMISTRY UNIT 1B

Centre:

Candidate Number:

UCI:

Series: 6M09

Candidate Name: 22-JUN-09

For completion by the Examination Invigilator. Please fill this circle if the candidate is absent:

HIGHER TIER

Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully.

Questions ONE to NINE Choose one response 1 - 4 for each of the parts A - D

| | | QUESTION ONE | 1 | 2 | 3 | 4 |
|----|------------------------------|--------------|---------|----|----|---|
| 1A | Molecule A | | 0 | 0 | 0 | 0 |
| 1B | Molecule B | | | 0 | 0 | |
| 1C | Molecule C | | 0 | 0 | 0 | |
| 1D | Molecule D | | 0 | 0 | 0 | 9 |
| | | QUESTION TWO | 1 | 2 | 3 | 4 |
| 2A | polymerisation | | \odot | 0 | 0 | 0 |
| 2B | thermal decomposition | | Ō | 0 | ō, | 0 |
| 2C | unsaturation | | 0 | () | 0 | Ö |
| 2D | hydration (addition of water | r) | 0 | 0 | 0. | |

| Ql | JESTI | ON T | HRE | E Ì |
|----|-------|------|-----|-----|
| | 1 | 2 | 3 | 4 |
| 3A | (0) | -0 | 0 | 0 |
| 3B | 0 | Q. | 0 | 0 |
| 3C | 0 | 0. | 0 | 0 |
| 3D | 0 | | 0 | ر ہ |

| | QUES | TION | SIX | |
|----|------|------|-----|----|
| | 1 | 2 | 3 | 4 |
| 6A | .0 | 0 | 0 | |
| 6B | Q _ | | 0 | ō. |
| 6C | G | | 0 | 0 |
| 6D | 0 | 0 | 0 | 0 |

| Q | UEST | ION F | OUR | 2 |
|----|------|-------|-----|-----|
| | 1 | 2 | 3 | 4 |
| 4A | 0. | Q | | . 1 |
| 4B | | 0 | 0 | |
| 4C | 0 | Ų. | 0 | 0 |
| 4D | 0 | O | 0 | 0 |

| QI | JESTI | ON S | EVE | N |
|----------|-------|------|-----|---|
| | 1 | 2 | 3 | 4 |
| 7A 7B | 0 | 0 | 0 | Ö |
| 7C | 0 | | | 0 |
| 7D | 0 | | 0 | |

| | QUEST | ION | NINE | |
|----|-------|-----|------|---|
| | 1 | 2 | 3 | 4 |
| 9A | 0 | 0 | 0 | 0 |
| 9B | | | 0 | |
| 9C | | | 0 | |
| 9D | 0 | 0 | | |

| | QUEST | ION | FIVE | |
|----|-------|-------|------|-----|
| | 1 | 2 | 3 | 4 |
| 5A | 0 | - O : | 0 | 0 |
| 5B | 0 | Q | 0 | 0 1 |
| 5C | | | 0 | 0 |
| 5D | 0 | 0 | 0 | 0 |

| Q | UESTI | ON E | IGH ⁻ | r |
|----|-------|------|------------------|---|
| , | 1 | 2 | 3 | 4 |
| 8A | 0 | 0 | O | 0 |
| 8B | 0 . | 0 | 0 | |
| 8C | 0 | 0 | 0 | 0 |
| 8D | 0 | - 0 | 0 | |

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Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully.

Ouestions ONE to NINE Choose one response 1-4 for each of the parts A-D

| | | Q | uestions | ONE to | | Choose on QUEST | | | 4 for each | | | | | | | |
|-----------------------|----------------|-----------------|-----------|------------|----------|--------------------|-----------|-----------|------------|---|----|----------|----|--------|------|----|
| | | Δtmos | nhere | | ' | WOE21 | IUN | ONE | | 1 | 2 | 3 | 4 | | | |
| 1A Atmosphere 1B Core | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | Crust Mantie | • | | | | | | | | A | | | | | |
| | טו | Marius | , | | | | | | | | | | | | | |
| | Ĺ. | DTEE | | | (| QUEST | ION | IWO | | 1 | 2 | 3 | 4 | 1. | | |
| | | PTFE | | | | | | | | | | | | | | |
| | 2B | Nylon | | | | | | | | | | | | | | |
| | | Polyst | yrene | | | | | | | | | | | | | |
| | 2D | PET | | | | | | | | | | | |). | | |
| | | | | | | UESTI | ON T | HREE | | 1 | 2 | 3 | 4 | | | |
| | 3 A | | - | at is a co | - | | | | | | | | | • | | |
| | 3B | | | | | noble ga | | | | | | | | • | | |
| | 3C | It is th | e noble | gas with | the lov | west boili | ng poin | ıt. | | | | | | | | |
| | 3D | There | are 18 (| cubic cm | of this | gas in 1 | 00 litre: | s of air. | | | | | |). | | |
| | | | | | C | QUESTI | ION F | OUR | | 1 | 2 | 3 | 4 | | | |
| | 4A | can re | lease a | large qu | antity (| of energy | | | | | | | | • | | |
| | 4B | is biod | legradal | ole | | | | | | | | | | • | • | |
| | 4C | is obta | ained fro | m a veg | etable | source | | | | | | | | • | | |
| | 4D | is uns | aturated | | | | | | | | | | |) • | | |
| | | | | | | QUEST | ION | FIVE | | 1 | 2 | 3 | 4 | | | |
| | 5A | Molec | ule A | | | | | | | 2 | | | | | | |
| | 5B | Molec | ule B | | | | | | | | | | | | | |
| | 5C | Molec | ule C | | | | | | | | | | | | | |
| | 5D | Molec | ule D | | | | | | | | | | | J• | | |
| QUEST | ION | ISIX | | | | QUESTI | ION S | SEVE | V | | | QU | ES | ΓΙΟΝ Ι | EIGH | ΙT |
| 1 | 2 | 3 | 4 | | | 1 | 2 | 3 | 4 | | | | 1 | 2 | 3 | 4 |
| | O _L | | | | 7A | | | | | | 8A | | | | | |
| | | | | | 7B | | | | | | 8B | | | | | |
| | | | | | 7C | | | | | | 8C | | | | | |
| | | | | | 7D | | | | | | 8D | | | | | |
| | | | | | | QUES1 | | | | | | | | | | |
| | | | | | | 1 | 2 | 3 | 4 | | | | | | | |

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6A 6B 6C 6D

2213

2213

9A 9B 9C 9D