

GCSE



**Chief Examiner's and
Principal Moderator's Report**
**Agriculture and
Land Use**

Summer Series 2023



Foreword

This booklet outlines the performance of candidates in all aspects of this specification for the Summer 2023 series.

CCEA hopes that the Chief Examiner's and/or Principal Moderator's report(s) will be viewed as a helpful and constructive medium to further support teachers and the learning process.

This booklet forms part of the suite of support materials for the specification. Further materials are available from the specification's microsite on our website at www.ccea.org.uk.

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GCSE AGRICULTURE AND LAND USE

Chief Examiner's Report

Subject Overview

The number of candidates and centres completing the course has increased once again, particularly in the grammar schools where the qualification has become increasingly popular.

It is very pleasing to report that the papers in the Summer 2023 series provided further evidence of good quality learning and teaching of the CCEA GCSE Agriculture and Land Use course. The level of knowledge and thinking skills shown in answers, particularly the extended writing questions, was commendable throughout and highlights the enthusiasm for the specification and the wealth of agricultural knowledge out there.

In both Units 1 and 2 there was a more demanding extended writing question which was less accessible to some candidates. As with the extended writing questions in previous years the candidates who were most successful, highlighted the key words in the bullet points and planned their extended writing question in the space before attempting an answer. In the extended writing questions candidates should be encouraged to include all their 'correct' knowledge and not just eight or nine points as candidates will not be given credit for similar answers. If the bullet point says to give at least three points, then candidates should be aiming to give more than three so that if there are other 'gaps' in their answers, they can still potentially achieve high marks. Perhaps due to the Advance Information given out this year candidates achieved higher marks in the extended writing questions than in previous years.

In general candidates should be encouraged to include as much detail in their answers for example, 'high running costs' or 'expensive to buy equipment' are more detailed answers than 'it's expensive'.

Assessment Unit 1 Soils, Crops and Habitats

Unit Overview

Overall, the standard of responses was high, with a range of question styles that gave candidates opportunities to demonstrate their knowledge and understanding. There were some challenging questions which allowed differentiation of the higher ability candidates. The Advance Information seemed to have helped candidates prepare for their examination. The language used in all the questions was deemed to be appropriate as most candidates attempted all questions and all candidates seemed to have enough time to complete the paper.

- Q1** Straightforward factual recall which was well answered overall by candidates.
- Q2** First part of the question was well answered by the majority, however, some candidates lost marks on the comparison between wind and insect pollinated flowers. The process of fertilisation was answered better this year which was aided by the use of key words in the box to choose from rather than a continuous prose answer which sometimes causes problems. The majority of candidates achieved 1 or 2 marks in the calculation.
- Q3** Candidates of all abilities were able to access marks on their knowledge of fertilisers at the beginning of the question, however, some found the nitrogen cycle part more demanding. This is an area of the specification where learning needs to improve for many candidates.

- Q4** Well answered by those that had knowledge of photosynthesis, however, some candidates had not learned the equation. Graph skills were good for many candidates and the description of the trend was well answered. Candidates still need to read the questions fully and explain trends using their knowledge of photosynthesis when required.
- Q5** Protected cultivation was well answered with many candidates achieving 2–4 marks using their knowledge of advantages and disadvantages.
- Q6** Candidates knowledge of silage growth, harvesting and preservation was good. The majority of candidates achieved Mark Bands 2 or 3. Some candidates still need to ensure that they include all the three bullet point areas in their answer in order to access top band marks.
- Q7** Many candidates did not read the question carefully and answered using their knowledge of the practical on % soil moisture instead of the drainage capacity.
- Q8** Well answered by most candidates. Many achieved marks on their factual recall from the specification on priority species. Fewer were better at applying their knowledge further to ASSIs.
- Q9** A number of candidates did not read the question properly and answered it using renewable energy sources, rather than biomass crops which was the focus of the question. However, many candidates accessed Band 2 or 3 using their knowledge from the specification.

Assessment Unit 2 Animals on the Land

Unit Overview

Overall, the standard of responses was high, with a range of question styles that gave candidates opportunities to demonstrate their knowledge and understanding. There were a couple of more demanding questions but these allowed differentiation of the higher ability candidates. The Advance Information seemed to have helped many candidates to prepare well for this examination. The language used in all the questions was deemed to be appropriate as most candidates attempted all questions and all candidates seemed to have enough time to complete the paper.

- Q1** Most candidates scored highly on the whole question; however, candidates should be reminded on their definition of what colostrum is.
- Q2** Most candidates scored highly on the whole question, however, candidates should be reminded that the large intestine does not absorb nutrients.
- Q3** Most candidates scored highly on the whole question and candidates' knowledge of the regulations around spreading slurry is to be highly commended. The answer of 'causes pollution' was too vague to receive credit in Question 3 Part (a)(i).
- Q4** Most candidates scored highly on the whole question. In Question 4 Part (a) some candidates did not receive any marks as they talked about 'slurry safety' and candidates should be reminded to try and answer the question that is being asked.
- Q5** This whole question tested candidates thinking and analysis skills and proved to be a discriminating question. In Question 5 Part (a)(i) candidates did receive marks for highlighting every twist and turn the graph took but candidates should be reminded that a trend is the general direction in which something is changing over time and furthermore that quoted data should be comparative. In the calculation in Question 5 Part (a)(ii) only a handful of candidates couldn't access at least some of the marks.

- Q6** This question tested candidates' ability to apply their knowledge in an unfamiliar context. An example was given to help candidates structure their responses. Most candidates achieved well in the question with many achieving full marks.
- Q7** The whole question was answered well by most candidates. In Question 7 Part (b) candidates' extensive knowledge of AI really showed here with most candidates scoring a mark of six or above. Candidates should be encouraged to include more detail than 'costs more' or 'it's expensive' as this needed more detail to achieve marks Question 7 Part (b).
- Q8** Answered well by many candidates. In Question 8 Part (b) some candidates gave different types of diversification examples. Candidates who wrote 'sell cheese, sell ice cream, sell yoghurt' only achieved 1 mark.
- Q9** Candidates' knowledge of salmonella and biosecurity was mostly excellent with many candidates scoring a mark of 6 or above.

Principal Moderator's Report

Internal Assessment Overview

This year saw the second submission of the controlled assessment element of the GCSE Agriculture and Land Use under the Revised specification (introduced September 2019). Again, the accuracy and consistency of marking is very encouraging. The majority of centres have an excellent grasp of the grading standard in both tasks.

There is still a tendency, as in previous years, for some candidates to ignore the word limit suggested for each task. While candidates are not penalised for being in excess of the word guidelines, they should be encouraged to adhere closely to it, with an excess of 10% suggested. Candidates should use appendices to include additional material they wished to submit as this material is not included in the word count. This practice is to be encouraged.

General Administration

As in previous years, centre administration continues to be generally excellent with only a few relatively minor administrative errors. Most centres continue to clearly annotate the submissions justifying the mark that was awarded to each section of each task with reference to the marking criteria. In some instances, however, it was difficult to ascertain the mark that had been awarded to a particular section of the task, or the total mark awarded to the task. The mark awarded for each section of each task, and the task totals, should be clearly indicated on the candidate submissions. This will greatly assist both internal standardisation (if applicable) and the moderation process. Candidate submissions should be collated, stapled and page numbers indicated. Candidate number should ideally be recorded as a header on each page. In some centres, submissions were retained by paper clips, without a candidate number on each page. These had a tendency to separate and cause confusion in the moderation process.

Candidate submissions should include an index and contents page with their task submissions. This improves the structure of the submissions and greatly assists with moderation.

Unfortunately, a minority of candidates continue to present their submissions in a Power Point format. These candidates should be instructed to present their submissions in a written report format.

Assessment Unit 3 Contemporary Issues in Agriculture and Land Use

Unit Overview

Task 1 Practical Investigation

While all topics were attempted for the Practical Investigation (Task 1), the effect of “Protected cultivation on seed germination and seedling growth” was the most popular.

The principles of a controlled experiment were generally clearly understood with a clear appreciation of both dependent and independent variables demonstrated. In some instances, however, the experimental design did not investigate two factors or independent variables, and this limited the marks that could be awarded in the planning section.

As in previous years, candidates continue to overlook the need to justify the experimental methods used and tended to lose marks in this section. Unfortunately, some candidates only used one form of mathematical technique to process their data. Mark Band 4 in the Analysis and Conclusions section of Task 1 stipulates more than one form of mathematical technique to be used. This can generally be achieved by averaging appropriate data and conducting a percentage calculation on appropriate data.

Candidates should state their results and trends and relate them to their hypothesis, for example, ‘protection had an effect on germination percentage, with percentage germination increasing when seeds were protected. This increase could be due to’ etc. As in previous years some candidates still struggle to draw appropriate conclusions from the data they collect and link their findings back to their initial hypothesis. As indicated in previous reports, in the evaluation section of Task 1, to obtain mark band four, suggestions for further research should link directly to the primary topic of the investigation and not merely any agricultural topic.

Task 2 Research Project

All three tasks were addressed across the centres with the students engaging well with them all, however, “Livestock Management Practices” and “Farm Health and Safety” proved most popular.

It is encouraging to see continued improvement in the structure of the Planning section across centres, with specific reference sources cited and the relevance of the topic outlined.

In the Planning section, candidates need to focus on a specific topic and present information succinctly and in their own words. Candidates should be encouraged to do independent and relevant research, with secondary sources referenced and correctly used. It is important to emphasise that secondary sources cited by the candidates in this section should be specific to the topic and not of a general nature.

As in previous years, some candidates do not provide any justification for the research methods used or an explanation of the procedures used. This limited the marks that could be awarded in this section.

It was again encouraging to see the effort that many candidates went to obtain primary data. The quality of some of the questionnaires produced was again excellent as indeed was the presentation of the quantitative data gathered. As in previous years, some candidate questionnaires still contain an insufficient number of focused questions to allow ‘detailed’ information to be gathered on the topic which limits the marks that can be awarded in this section.

In the presentation of findings, marks are still being lost by some candidates due to the absence of titles, labels, keys, and units and the use of non appropriate graphical forms to present their data. Mark Band 4 requires the use of more than one graphical form to present data.

The conclusion and evaluation sections are generally still the sections that some candidates find challenging. As in previous years, linking their findings (primary data) to the secondary data still proves difficult for many candidates in the conclusion section. Statements of how the information gathered from their primary data compares, agrees, or disagrees, with what is found in the secondary, published, sources are typically all that is required.

There is still a tendency for the conclusion and evaluation sections to be generously marked in some centres. In the evaluation section, to obtain top of Mark Band 4, it is important that suggestions for further research are specific and are directly linked to the primary topic with some logical details of how they would do this.

Contact details

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