AGRICULTURE

Paper 0600/11
Theory

Key messages

Weaker candidates should note the wording in each question and ensure they are answering the question as set.

Candidates should ensure that any diagrams or working they provide are presented in a careful, clear and logical way.

General comments

Candidates gave some particularly good responses to the last section in particular. Stronger candidates frequently provided detailed, carefully organised and well-reasoned responses. Some weaker candidates had difficulty applying their knowledge to scenarios or situations. Some weaker candidates gave responses that were insufficiently developed.

Comments on specific questions

Section A

Question 1

(a) Many candidates gave a good range of responses. Some weaker candidates, however, included effects relating to other pests or issues.

(b) (i) Stronger candidates usually demonstrated accurate knowledge of examples. Some weaker candidates did not have secure knowledge of examples.

(ii) This question was generally answered well by most candidates. Stronger candidates were able to apply their knowledge well, usually that relating to the use of a predator.

(iii) Some detailed knowledge was demonstrated here with many candidates showing an excellent understanding of practical agriculture.

Question 2

(a) This question was generally answered well. Most candidates knew that the capital and lowercase letters represented dominance. Stronger candidates could provide a full answer for full credit.

(b) Many candidates answered this question well. Some weaker candidates stated genotypes instead.

(c) This genetics question was answered well by most candidates, who usually identified the parent gametes, offspring genotypes and the ratio arising from the cross correctly. Most candidates gave a good, well-applied response to this question. Weaker candidates often showed inaccurate cross outcomes. Some candidates used incorrect letters, some of which were not clear.

Question 3

(a) Stronger candidates demonstrated a very good understanding of practical agriculture across the requirements of this question. Many others applied their knowledge well to at least some aspects.

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(b) This question was generally answered well by most candidates. Some weaker candidates resorted to repetition.

Question 4

(a) This was usually answered well with many candidates scoring full credit and showing a breadth of knowledge. Some candidates did not describe both harvesting and storage.

(b) This was frequently very well answered with many candidates scoring full credit. Weaker candidates repeated that weeds could reduce crop yields without stating why.

Question 5

(a) (i) Many candidates clearly described what is meant by pollination. Some weaker candidates did not refer to the key plant parts.

(ii) Generally, only the stronger candidates gained full credit. These candidates suggested distinct ways to increase pollination in crops, such as using bee release and dusting.

(b) This question was generally answered well by stronger candidates. Some weaker candidates confused the anther and stigma. The strongest candidates knew all parts.

(c) Stronger candidates explained how an adaptation maximises the chance of pollination. Some weaker candidates referred to the features of an insect-pollinated plant.

Question 6

(a) (i) Many candidates correctly stated a farming practice which can decrease soil pH. Some weaker candidates seemed to be confused about pH.

(ii) This question was answered very well by many candidates. Generally, weaker candidates did not seem to have secure knowledge of soil pH changes.

(b) (i) This question was generally answered well. Many candidates demonstrated a good understanding of the ways in which nitrogen is made available to plants through processes of the nitrogen cycle.

(ii) This question was answered very well by many candidates. Some weaker candidates did not demonstrate knowledge of common plant symptoms of soil nitrogen deficiency.

Question 7

(a) Stronger candidates described well the aspects of the birth of a named mammalian farm animal. Weaker candidates sometimes did not identify a mammalian animal or described other topics instead.

(b) This question was answered well by many candidates. Some weaker candidates left their responses as very generalised statements and so unfortunately too vague for credit to be able to be awarded.

Question 8

(a) This question was generally answered very well with good knowledge shown by many candidates.

(b) This question required an application of knowledge. Generally stronger candidates labelled the diagram accurately. Weaker candidates sometimes could not label the vagina. Some candidates drew label lines without sufficient precision.

(c) Most candidates gave a good, well-applied response to this question. Weaker candidates sometimes referred to other topic areas and may not have had a secure knowledge of artificial insemination.

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Question 9

(a) (i) Many candidates calculated this correctly, often using the working space effectively.

(ii) Many candidates calculated this correctly. Some weaker candidates did not select from the table correctly.

(b) This question was answered well by most candidates, who suggested a range of ways in which mechanisation could reduce crop yields.

Section B

Question 10

(a) This question was answered well. Many candidates were able to describe the features of a zero-grazing system succinctly.

(b) The responses to this question were usually well-detailed, with stronger candidates often effectively describing and explaining a range of methods to improve pasture quality. Weaker candidates tended to name methods only or seemed to know only one or two.

(c) Most candidates appeared to know some ways in which rotational grazing can increase the yield of a pasture. There was generally a lack of explanation in the responses of some weaker candidates.

Question 11

(a) This question was generally answered very well with good knowledge shown by many candidates.

(b) Many candidates were able to describe several cultural methods of pest control, demonstrating understanding of the practical application of specific techniques. Stronger candidates gave a good breadth of response. Weaker candidates often did not include how the methods control pests.

(c) This question was generally answered very well with clear explanations given by many of the candidates.

Question 12

(a) Many candidates gave good responses outlining soil pH testing in a field. Stronger candidates showed detailed knowledge.

(b) Stronger candidates explained the importance of a good soil crumb structure clearly. Weaker candidates sometimes showed confusion about soil properties and content.

(c) Stronger candidates usually gave responses relating directly to forest clearance. Some weaker candidates focussed on describing subsequent activities.

Question 13

(a) Most candidates described how very low environmental temperatures can affect crop growth. Some weaker candidates referred to one or two general effects only.

(b) Stronger candidates usually described a range of methods to reduce frost damage, demonstrating good knowledge and sometimes seemed to show an understanding of practical agriculture. Careful application of terminology was a feature of the most successful answers. Candidates should be advised to use terminology carefully.

(c) Most candidates suggested a range of possible dangers of excessive heat to plants. The strongest responses referred to practical ways in which these risks could be reduced.

Question 14

(a) Stronger candidates stated what is meant by a maintenance ration in detail and with precision.

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(b) Most candidates successfully described livestock farming situations which require a production ration, demonstrating clear understanding of this concept. Weaker candidates sometimes restated the same farming situations.

(c) Most candidates suggested a range of foods and possible nutrients each food could provide. The strongest candidates identified a different nutrient for each food.

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AGRICULTURE

Paper 0600/12
Theory

There were too few candidates for a meaningful report to be produced.

CAMBRIDGE
International Education

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AGRICULTURE

Paper 0600/02
Coursework

Key messages

The strongest portfolios included original logbooks or authentic working notes, while weaker submissions relied solely on edited summaries and unannotated photographs, which provide limited evidence.

Investigative reports could be strengthened by deeper scientific reasoning in conclusions and deductions. In investigations, candidates often described results but did not explain them using agricultural principles or secondary research. In addition, limitations were sometimes underdeveloped. To access the higher bands of the mark scheme, candidates need to include multiple limitations with feasible improvements.

Data handling was generally good, but some candidates showed incomplete graph labelling and limited data processing. The strongest work consistently linked data presentation to analysis, producing more insightful conclusions.

General comments

Many portfolios showed strong organisation, clear presentation and a genuine enthusiasm for practical agricultural work. The majority of candidates produced well-structured investigations with clear aims, logical planning and thorough data collection. Photographic and video evidence was generally of good quality, often helped to support practical skills, and was usually well integrated. Where candidates included reflective commentaries, either written or verbal, this tended to significantly strengthen depth.

Some centres submitted only photographic evidence with limited explanation, which restricted the credit that could be awarded for skill demonstration. Investigative reports were usually well-presented, often typed and neatly bound, but some would have benefited from clearer annotation to indicate where credit had been awarded. Centres are encouraged to maintain high organisational standards while ensuring authenticity, sufficient reflection and adherence to syllabus requirements.

Comments on specific areas

Practical Exercises

Most candidates described their practical activities clearly and logically, often including helpful photographs or videos in support. Stronger candidates explained the purpose of each task, equipment used and the sequence of actions taken. Weaker descriptions were often brief or lacked context. The strongest work included reflections on candidates' activities and reference to problems encountered and adjustments made. Strong work included step-by-step descriptions supported by annotated photographs or authentic diary entries.

Stronger portfolios included thoughtful comments on what went well, what needed improvement and how skills could be developed. Authentic logbooks with dated entries provided particularly strong evidence. Weaker submissions included purely descriptive accounts. Reflection may be written, annotated on photographs or delivered through video commentary.

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Practical Investigation

Most candidates selected appropriate, focused questions. Stronger investigations provided clear rationale based on background research. Weaker submissions were broad, vague or lacked a hypothesis. The strongest candidates linked the research question to scientific principles and referenced secondary sources.

Planning was generally good, with clear outlines of equipment, variables and methods. Stronger plans were detailed and referenced research. Some candidates omitted relevant variable control or complete methods. Strong examples demonstrated scientific reasoning, risk assessment and justification.

Data collection was often thorough. However, sometimes there was incomplete labelling, missing units or absent graph titles. Stronger candidates processed data using means, trend analysis or comparisons. Tables and graphs needed to be clear, accurate and fully labelled.

Many candidates summarised trends but did not explain them scientifically. Stronger candidates made deductions and linked findings to agricultural principles. The stronger deductions integrated data patterns with scientific reasoning and research.

Limitations were frequently underdeveloped in weaker examples. Stronger portfolios listed multiple limitations and paired each with realistic improvements.

Presentation was generally excellent. Stronger portfolios showed individuality, consistent formatting and clear referencing. However, some other portfolios lacked annotation. Candidates should ensure work is logically structured, labelled and easy to navigate.

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