

# **EXAMINER'S REPORT**

SUBJECT: Agricultural Sciences

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DATE OF EXAMINATION: 01/12/2008	DURATION:	2 hours
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# 1. ANALYSIS OF QUESTION BY QUESTION PERFORMANCE OF THE CANDIDATES

Give a detailed account of how the candidates performed in each question. In doing this, the following steps should be followed:

- 1.1 The aim/objective for setting the question (what skills, knowledge, values and attitudes were being tested by asking the question)
- 1.2 Relevance or relation of the question to the Los and ASs.
- 1.3 How did the candidates perform in the question?
- 1.4 Where and how did candidates lack or fail in giving an appropriate answer to score high marks in the question?

#### **QUESTION 1**

- 1.1. Fairly done as many candidates answered it.
- 1.2. Too many options were suggested as possible answers and this has confused candidates.
- 1.3. The answer needed a term/one word as per the instruction and not the calculation.

Many learners gave the term/word instead of doing calculation. His response as per marking guideline has disadvantaged many candidates.

1.3.3. Many learners wrote standardization as an answer but it was not credited as this was not the answer as per marking guideline.

- 2.1.1. Diagram A was not clear. The diagrams are Focus in Agricultural Sciences biased and this has handicapped learners who have no access to "Focus" as a resource.
- 2.1.2. The questions were based on the diagram in 2.1.1. and most learners were disadvantaged due to invisibility of the diagrams, especially diagram A.
- 2.2.1. Learners could not answer the questions very well due to the following reasons:
  - The data in the table is given in kilograms, but the question asked in tons without providing a conversion table as it operates in Maths and Physical Science. Learners could not convert from memory.
  - The mark allocation of 2 for that lengthy calculation was unfair.
- 2.2.3. The marking guideline was too shallow on the differences between

roughages and concentrates. Candidates gave other responses which could not be credited, though correct.

- 2.3. The instruction did not ask learners to show calculation and this has disadvantaged candidates because they wrote the answers and as a result they lost marks because they did not show the steps.
- 2.4.1. Learners could not accurately indicate the percentage levels of the farm foreman and farm worker, because the scale of the graph from 0-100 was not accurate yet in the memo exact figures were given. So a percentage range of 45-55 could have been accepted.
- 2.4.2. The instruction verb "identify" misled the learners because it was posed as if the learners should identify the steps of planning from the data provided and many learners tried to figure out the steps from the data provided.

The responses found in the other books like Focus were not catered for in the marking guideline and learners were not credited for such responses.

I.e.

- Overview of the project
- Staffing
- Marketing channels etc.
- 2.4.3. The question did not specify the field of specialization so learners gave answers that were different from what the marking guideline demanded.

E.g. agriculture economist, vet officer etc.

- 2.5. Learners wasted too much time reading and interpreting the question done.
- 2.5.1. Many learners could not identify the type of breeding.
- 2.5.2. There was contradiction in the question and the memorandum, whilst the question indicates that specialized knowledge is required an the learners were confused as they were responding to the scenario provided.
- 2.5.3. This question was not clear as to what it required and man learners have

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drawn mating animals. The question could have been understood better if it was phrased as "determine the probability of producing heifer calves by mating a bull and a cow using their XY and XX chromosomes.

2.5.4. Many gave  $F_3$  generation as the answer.

#### **QUESTION 3.**

- 3.1.1. Most learners were confused by the question as it asked about the hormonal changes leading to behaviour in diagram A. Many gave responses of what they saw in the diagram. I.e. cows mating each other etc.
- 3.1.2. Most learners gave the heat signs and they were not awarded marks for that.
- 3.1.3. The question disadvantaged learners because some learners gave"evening" as their answers because of the range of hours that constitutemorning. The question should have indicated the actual time in the morning.
- 3.1.4. Question 3.1.4. misled learners because it required the process in the diagram B and yet there are three process occurring. I.e. development of graafian follicle, development of corpus luteum and ovulation. The question did not refer specifically to which process. This could have been clarified by giving labels in order to avoid confusing learners.
- 3.2. The diagram was picked from "Juta" and thus has disadvantaged learners who do not have access to Juta.
- 3.3.2. From the scenario, Tuli breed is selected for its fertility. This indicates that it has the ability to reproduce more hence it could be of economic value.However, Tuli is not considered in the memo. Learners who gave Tuli breed as an answer were not awarded marks.
- 3.3.3. The question should have been an open question and the memo should have considered all relevant alternatives. The marking guidelines catered for few responses hence learners were not credited for responses not in the marking guideline, though they were correct.
- 3.5.1. It was very unfair for learners to define a term for only one mark. However most learners did give a definition.
- 3.5.2. Well answered by most candidates.
- 3.5.3. The word "collateral" has confused learners and they have lost the meaning of the question.
- 3.6.1. Most learners managed to draw a line graph except that the heading was missing and as a result, they lost marks.

- 3.6.2. Learners were able to interpret the graph.
- 3.6.3. Most learners were unable to give reason for a low fat content in beef as expected in 2010.
- 3.6.4. It was well answered by most learners.

## **QUESTION 4**

- 4.1. Learners performed poorly in this question. This may be due to a lot of data in the question. I.e. graph, scenario, table. The learners wasted a lot of time to read and interpret to earn only 7 marks. This question was rather difficult for them.
- 4.2. Learners could not design a removal permit and this question is more suitable for a learner doing AMP rather than Agricultural Sciences.
- 4.3. Most learners responded well to the question but some were unable to identify the vitamin deficient and the functions thereof.
- 4.4. Learners did well as they were able to give reasons for a skill development programme.
- 4.5. Question 4.5.1. and 4.5.2. were too open because all markets could be suitable for marketing prime beef. Most learners did identify the market, but without reason and as a result they lost marks because the correctness of the answer depended on correct reason given. (Although they gave the group but wee not awarded marks due to the absence of a reason).

Most learners did not answer the question due to the fact tat percentage of the population was not scaled on the graph. It was therefore difficult for learners to give percentage as required. It was not possible for them to pick up numbers while there is no indication of numbers from the graph.

The educators should refrain from using the rated 550 approach in a classroom setting but rather apply NCS based approach. This can be achieved through:

- Addressing LO, assessment standards when planning their lessons.
- Focus on the critical outcomes and developmental outcomes and therefore the classroom activities should be centred around developing the learner's critical and an analytical mind.
- A wide range of data based question should be set on a regular basis so as to acquaint learners with the standard of question that a NCS learner is expected to answer.
- Educators should always adhere to Bloom's taxonomy when setting questions, ensuring that instruction verbs applicable per level are clearly indicated. These verbs will assist educators to set questions appropriate to each cognitive level.
- Educators should not rely on textbooks when teaching but rather on LO's and assessment standards as these speak to the content.
- To maintain the standard, tasks especially those, counting toward CASS should be common for cluster and if possible for the Districts. Subject specialists should be utilized in the moderation of such tasks.

# 8. ANY OTHER COMMENTS

- a) From the comments on the report, it is suggested that maximum effort and consideration be given to the paper presented for the Grade 12 learner at the end of the year.
- b) The placing of agricultural Sciences at the end of the time table every examination year is a disadvantage to the learners. The examinations are written over along time and learners get tired towards the end. It is suggested that the times for writing be shifted for subjects during the examinations.

### SIGNATURE OF EXAMINER/MODERATOR: \_\_\_\_\_



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