# THE MALAWI NATIONAL EXAMINATIONS BOARD



# 2024 PRIMARY SCHOOL LEAVING CERTIFICATE EXAMINATION

#### **CHIEF EXAMINER'S REPORT**

### **PRIMARY SCIENCES (P163)**

#### **General Comments on:**

### A. Quality of the Paper

The 2024 Primary Science paper was fair. It covered all the core elements in the teaching syllabus and tested all the skills and it compared well with the previous papers. The language used was suitable for primary school level.

### **B.** Overall Performance of Candidates

The general performance of candidates was average. There were some candidates who performed very well while others performed poorly. Candidates who performed well demonstrated mastery of skills in science. They were also able to construct grammatically correct sentences in their responses. Candidates who performed poorly failed to express themselves in grammatically correct English. This made them to lose a lot of marks.

Almost all the candidates performed very well on recall questions than reasoning and application of knowledge.

## C. Comments on Performance of Candidates on Individual Questions

#### Section A

#### AGRICULTURE

In this section, the general performance was above average. Most candidates performed very well. However, most candidates performed poorly on the questions which involved critical thinking.

### **Question 1**

This question asked candidates to choose a way of preventing snuffle disease in rabbits. Most candidates got it right. Those who failed opted for B (vaccinating the sick rabbit).

The question asked candidates to choose the cause of tuberculosis in cattle. Most of the candidates got it right. This reflected thorough coverage of the topic.

## **Question 3**

The question asked candidates to identify a part of a sprayer which delivers the spray. Almost all the candidates got it right. This reflected thorough coverage of the topic.

### **Question4**

The question asked candidates to identify the most convenient way of transporting bulky produce. A few candidates got it right. Those who failed opted for D (using a bicycle). It showed that most candidates did not know the meaning of 'convenient'.

### **Question 5**

The question asked candidates to identify a farm produce which is highly perishable. Most of the candidates got it right. It reflected thorough coverage of the topic.

### **Question 6**

The question asked the candidates to identify a characteristic of a natural forest. A few candidates got it right. Those who failed opted for B (trees grow uniformly), which is a characteristic of planted forest.

### **Question 7**

The question asked candidates to identify a land preparation activity. Almost all the candidates got it right. It reflected thorough coverage of the topic.

### **Question 8**

The question asked for a way of preserving flowers. Almost all the candidates got it right. This reflected thorough coverage of the topic.

The question asked candidates to identify a pest that attack flowers. A few candidates got it right and the majority that failed opted for C (false coding moth) which is a pest for fruits.

### **Question 10**

The question asked candidates to identify a crop which grows well in sand soils. Almost all the candidates did very well. It reflected thorough coverage of the topic.

### **Question 11**

The question asked candidates to identify a sign of maturity for pawpaws. Almost all the candidates got it right. This reflected thorough coverage of the topic.

## **Question 12**

The question asked candidates to identify a sub branch of crop production in which the growing of oranges belong. Most candidates got it right. Those who failed opted for C (horticulture).

### **Question 13**

The question asked the candidates to identify the main characteristic of subsistence farming. Almost all the candidates got it right. This reflected thorough coverage of the topic.

### **Question 14**

The question asked candidates to identify a method of controlling diseases from spreading in cattle. A few candidates got it right. Most of those who failed opted for B (dipping) which is a method of controlling parasites.

### **Question 15**

The question asked candidates to identify a reason for thinning flowers. A few candidates got it right. Most of the candidates failed because they opted for A as an answer (making a desirable shape) which is a reason for trimming flowers.

The question asked candidates to identify the use of a windmill. Almost all the candidates got it right. This reflected that most teachers covered this topic thorough.

## **Question 17**

The question asked candidates to identify a way of maintaining a watering cane. Almost all the candidates got it right a reflection of thorough topic coverage.

### **Question 18**

The question asked candidates to identify a layer. Most of the candidates got it right. A few candidates got it right. Many failed because they gave option B (Stabro), as an answer which is a broiler.

### **Question 19**

The question asked candidates to identify weather change which damages bananas. Most of the candidates got it right. Those who failed opted for C (hailstorm).

## **Question 20**

The question asked candidates to identify a fruit vegetable. Almost all the candidates got it right. This reflected thorough coverage of the topic in schools.

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### **Question 21**

The question asked learners to identify examples of direct sources of light. Almost all candidates got it right which reflected thorough coverage of the topic.

### **Question 22**

The question asked candidates to identify a function which was not for the skin. A few candidates got it right. Those who failed gave option D (controlling body temperature) as an answer.

The question asked candidates to identify the component of blood which transports oxygen. Almost all the candidates got it right.

### **Question 24**

The question asked candidates to identify a way which does not transmit HIV and AIDS. Almost all the candidates got it right. This reflected adequate coverage of the topic.

### **Question 25**

The question asked candidates to identify a technology which helps to conserve the environment. Almost all the candidates got it right. This reflected thorough topic coverage.

## **Question 26**

The question asked candidates to identify a given modern technology. A few candidates got it right. Those who failed opted for A (computer monitor) as an answer.

### **Question 27**

The question asked candidates to identify a disadvantage of the given technology identified in question 26. Most of the candidates got it right. Those who failed opted for C (increases employment) as an answer.

### **Question 28**

The question asked candidates to identify a reason for adding salt when dyeing a cloth. A few candidates got it right. Those who failed gave option D (to make it strong) as an answer. This indicated that practical lessons were not carried out.

### **Question 29**

The question asked candidates to identify the importance of kitchen hygiene. Almost all the candidates got it right.

## **Question 30**

The question asked candidates to identify products which are made locally. Almost all the candidates performed very well. This reflected thorough coverage of the topic.

The question asked candidates to identify a reason for including food rich in fibres to meals. Almost all the candidates got it right. This reflected thorough coverage of the topic.

### **Question 32**

The question asked candidates to identify a joint which allows to and fro movement. Almost all the candidates got it right. This reflected that the topic was widely covered.

### **Question 33**

The question asked candidates to identify a protozoa. Almost all the candidates got it right. It reflected good topic coverage.

## **Question 34**

The question asked candidates to identify the effect of polio disease to an individual. Almost all candidates got it right. This reflected thorough topic coverage.

## **Question 35**

The question asked candidates to identify a substance which produces chemical energy. Almost all the candidates got it right. This reflected that the topic was well covered.

### **Question 36**

The question asked the candidates to identify a blood vessel which carried blood from the lungs to the heart. Most of the candidates got it right. A few failed because they opted for D (pulmonary artery) as an answer.

### **Question 37**

The question asked the candidates to identify a cooking method from a given illustration. Almost all the candidates got it right.

#### **Question38**

The question asked the candidates to identify the advantage of the given cooking method. Almost all the candidates got it right. This reflected topic coverage.

The question asked candidates to identify the stage of development which is formed when fertilization takes place. Most of the candidates got it right. Those who failed opted for D (embryo).

### **Question 40**

The question asked the candidates to identify a deficiency disease which causes swelling of the body. Most of the candidates got it right. Those who failed gave option A (marasmus) as the correct answer.

#### **Section B**

#### **AGRICULTURE**

### **Question 41a**

The question asked the candidates to state any two ways in which vegetables are important at household level. Almost all the candidates got it right. Those who failed gave vegetable importance at national level.

## **Question 41b**

The question asked candidates to state any two effects of too much water in the soil on crop production. A few candidates got it right. Those who failed wrote death of livestock.

### **Question 41c**

The question asked candidates to mention ant two characteristics of Flemish giant breed of rabbits. Most of the candidates got it right. Those who failed wrote characteristics of New Zealand white; it is big.

### **Question 42a**

The question asked candidates to give a reason for having a cage of a buck slightly larger than that of a doe. Most of the candidates got it right. Those who failed gave wrong spellings such as; 'to accommodate a buck and doe during **melting** instead of 'mating'.

### **Question 42b**

The question asked candidates to give any two reasons for placing dry litter on the floor of a cattle house. Most of the candidates got it right. Those who failed gave wrong responses such as controlling pests and using it as feed.

### **Question 42c**

The question asked candidates to explain any one way in which fish farming is important. A few candidates got it right. Most candidates failed to give an explanation, they just stated the points such as; source of food.

### Question 43a

The question asked candidates to mention any two ways of managing soil. Most of the candidates did well. Those who failed gave wrong responses such as 'avoid making ridges across the slope'.

### **Question 43b**

The question asked candidates to describe any two ways in which soil is important to crops. A few candidates did well. Those who failed just stated the points without describing e.g. holding plants.

#### Question 44a (i)

The question asked candidates to state a reason for considering water supply as a factor when choosing a site for a fish pond. Most of the candidates got it right. Those who failed gave answers like for irrigation which was wrong.

#### Question 44a (ii)

The question asked candidates to state a reason for choosing slope of the land as a factor when choosing a site for a fish pond. Most of the candidates performed very well. A few failed because they gave wrong responses such as steep slope and gentle slope which are types of slopes.

## **Question 44b**

The question asked candidates to classify given breeds of cattle into dairy and beef. Almost all the candidates got it right. Those who failed included Jersey which was not on the given list.

### **Question 45a**

The question asked candidates to state any two animal husbandry practices. Almost all the candidates got it right. Those who failed gave wrong spellings such as **proper bleeding** instead of **proper breeding**.

### **Question 45b**

The question asked candidates to give any two advantages of keeping chickens in battery cages. Almost all the candidates performed very well. Those who failed wrote wrong spellings such as easy to **correct** eggs instead of easy to **collect** eggs.

### **Question 46a**

The question asked candidates to mention any two ways in which farm records are important. Almost all the candidates performed very well. This reflected thorough coverage of the topic. The few who failed gave types of farm records.

### Question 46b (i)

The question asked candidates to identify a month in which a farmer made a lot of sales from a given information in a table. Almost all the candidates got it right. However a few who failed could not pick the correct information from the table.

#### Question 46b (ii)

The question asked candidates to name the problem of agricultural marketing which affected the farmer in the month of April in the given table. Most of the candidates got it right. Those who failed gave wrong answers like demand and supply.

### **Question 46c**

The question asked candidates to give any two characteristics of a good goat house. Almost all the candidates got it right. The few who failed wrote "types of goat houses such as raised and unraised goat house.

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### **Question 47a**

The question asked the candidates to mention dangers of light energy on human beings. A few candidates got it right. Most of those who failed wrote night blindness as an answer.

#### Question 47b.

The question asked the candidates to give any two sources of heat energy. Almost all candidates got it right. This reflected thorough coverage of the topic.

### Question 48a (i)

The question asked candidates to identify muscles which were labelled Q and X on diagram of the arm. Most candidates got it right. Those who failed wrote wrong spellings such as 'bysepiece' and 'trysepiece'.

### Question 48a (ii)

The question asked candidates to explain any one in which the muscle which was labelled Q enables movement of the arm. A few candidates got it right. Those who failed wrote wrong responses such as; 'when muscle Q relaxes', it bends the arm instead of 'when muscle Q contracts'. This also reflected lack of observation skills.

#### **Question 48b**

The question asked candidates to give any one example of a gliding joint. Almost all the candidates got it right. This reflected thorough coverage of the topic.

## **Question 49a**

The question asked candidates to mention the symptoms of worm infection in human beings. Almost all the candidates got it right. Those who failed wrong responses such as vomiting and itching.

### **Question 49b**

The question asked candidates to name any two animal products suitable for a lacto vegetarian. Most the candidates got it right. Those who failed wrote wrong answers such as meat.

## **Question 49c**

The question asked candidates to mention any two ways of controlling bleeding. Most candidates got it right although a few wrote ways of controlling nose bleeding such as 'avoid blowing the nose'.

### Question 50a

The question asked the candidates to the stages of a scientific investigation. Almost all the candidates got it right. This reflected thorough coverage of the topic.

### Question 50b (i)

The question asked candidates to identify a given family planning method. Most candidates got it right. Those who failed gave wrong responses such as 'tubal irrigation' instead of 'tubal ligation'.

## Question 50b (ii)

The question asked candidates to describe the way the identified family planning method works. A few candidates got it right. Most of the candidates just stated e.g. it prevents pregnancy instead of describing the process.

### **Question 51a**

The question asked candidates to mention any two technologies for marketing. Almost all the candidates got it right and this reflected thorough coverage of the topic.

### **Question 51b**

The question asked candidates to define the term 'sedentary worker'. Almost all the candidates performed very well which reflected thorough coverage of the topic.

### **Question 51c**

The question asked candidates to mention two functions of roots to a plant. Almost all the candidates got it right. This reflected adequate and thorough coverage of the topic.

### Question 52a

The question asked candidates to identify a nutritional deficiency disease given in a diagram. Most candidates got it right. Those who failed wrote wrong spellings such as 'rikcytes' some even wrote it in vernacular 'kisimabondo'. The candidates had the skill of observation.

#### **Question 52b**

The question asked candidates to mention any one way of treating the identified in question **52a**. Most candidates got it right. This reflected good coverage of the topic.

### **Question 52c**

The question asked candidates to mention any two factors to consider for the meals to be served in an attractive way. Most candidates got it right. Those who failed gave wrong responses such as number of people and age which are factors to consider when planning a meal.

### **D.** Recommendations to:

#### (i) Schools

- Practical lessons should be conducted regularly and thoroughly.
- Technical vocabulary should be emphasised when teaching.
- Revision should be done from standard five work when preparing candidates for examinations.
- Encourage candidates to use black pens when writing exams.
- Study circle should be encouraged.

#### (ii) Ministry of Education

The Ministry should:

- Provide enough teaching and learning materials in schools
- Programs/projects should be included in all levels of primary school education e.g. NRP only done in infant and junior sections
- All the subjects in infant and junior section should be taught in English except Chichewa. This will assist learners to understand questions which are in English during national examinations.