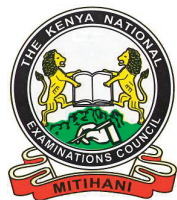


443/3 Instr. to Sc.  
**AGRICULTURE PROJECT**  
**Paper 3**  
**Jan. - Sept. 2017**



**THE KENYA NATIONAL EXAMINATIONS COUNCIL**  
**Kenya Certificate of Secondary Education**  
**AGRICULTURE PROJECT**  
**Paper 3**

**Instructions to Schools**

*Each school presenting candidates for Agriculture (443) in the KCSE examination for the year 2017 will produce **two** copies of this document. One copy of the document will be for the Head teacher and the other one for the teacher in charge of Agriculture project hereafter referred to as the Agriculture teacher.*

*The Head teacher and the Agriculture teacher should each read the document carefully. Relevant information should then be conveyed to the candidates as soon as possible to enable them to carry out the project in good time.*

*There are two alternative projects, namely **Project A** and **Project B**. Each school should select only **one** alternative. It is therefore necessary for the Agriculture teacher to discuss the alternatives with the Head teacher and the candidates so as to select the most appropriate alternative.*

*The Agriculture Teacher will mark all candidates' projects.*

*The projects should be accessible to authorised KNEC agent(s).*

**This paper consists of 5 printed pages.**

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## GENERAL INSTRUCTIONS

1. *The Agriculture Teacher should brief the candidates on the requirements of the projects as soon as the school receives this document from the Kenya National Examinations Council (KNEC). The candidates, the Agriculture teacher and Head teacher should then discuss the alternative projects and make a suitable choice.*
2. *The school should provide the candidates with adequate **resources** for their project.*
3. *The candidates should be instructed to keep records of their activities and observations which they shall use to write the final project report.*
4. *Each candidate should be supplied with an adequate number of ruled A4 papers on which to write the project report. The report should be between 1, 000 and 1, 500 words.*
5. *In addition, each candidate should be given a declaration form which will make the first page of the report.*
6. *The school should provide adequate security for the candidates' projects.*
7. *The project chosen by the school must be seen and treated as an examination. It must therefore be the candidates's true and unaided work. At the same time the scores awarded by the Agriculture teacher must be objective and remain confidential.*
8. *The Agriculture teacher should assess each candidate's project from time to time using the marking scheme provided by the KNEC and enter the marks in the project assessment sheets. It is **absolutely important** that the marks are entered in the project assessment sheets **immediately** after each assessment.*
9. *All the project assessment sheets must be kept under lock and key in the Head teacher's office in a sealed envelope. They should be made available **only** to the Agriculture teacher whenever the teacher is going to assess the project or an authorised KNEC agent. The sheets must be returned to the Head teacher immediately after each assessment. The Head teacher should check to ensure that scores are entered on the assessment sheets after every assessment. In the absence of the Head teacher, the Deputy Head teacher should be in charge of the custody of the documents.*
10. *At the end of the assessment, the Agriculture teacher should transfer the total score of each candidate from the assessment sheet to the manual mark sheet. The index numbers of candidates should be entered in ascending order ensuring that all candidates **have the same Index Numbers as in the final examination.***
11. *The Agriculture Teacher should write a brief report about the centre using the centre report form provided by the KNEC.*
12. *At the end of the project, the Head teacher **must** ensure that the assessment sheets and manual mark sheets are duly filled, signed and stamped. All the candidates' Agriculture Project Reports, project assessment sheets, manual mark sheets and project report form for the centre should be packed and **handed over to the District Education Officer by 29<sup>th</sup> September 2017.***
13. *The Sub-Conty Director of Education will then hand over **all** the documents to the Kenya National Examinations Council by **30<sup>th</sup> November 2017.***

## PROJECT A: RABBIT REARING

1. This project shall be carried out in second term by candidates in form IV. However, the school should start early preparations such as making/buying hutches, procuring rabbits etc. from first term. The candidates should conclude the project at the **end of the 12th week of second term**, when they should hand over the project to the school. The school should then make appropriate decision and arrangement on how best to rear the rabbits or to dispose them.
2. Schools choosing this project shall be required to provide **each** candidate with the following facilities at the times stated:

(a) **Rabbit hutches**

Each candidate should be provided with a rabbit hutch during the **last week of first term**, at the latest. The hutch should be purchased by the school. The dimensions of the hutch should be 120 cm long, 60 cm wide and 60 cm high; or large enough to accommodate a doe and litter. The hutch should be raised 60 cm above the ground level. It is important to ensure the following about the hutch:

- (i) The hutch should be well ventilated.
- (ii) The roof should be waterproof, if the hutch is to be kept outdoors.
- (iii) The floor should be made of wire mesh or wooden slats.
- (iv) Each hutch should be fitted with a waterer and a feeder.
- (v) Nesting boxes measuring 38 cm x 25 cm x 20 cm should be provided by the school for the candidates' use at the appropriate time.
- (vi) Appropriate bedding material should be placed on the floor.
- (vii) Hutches may be made singly or in several units attached horizontally.
- (viii) Hutches can be placed indoors or outdoors depending on design and security arrangements.
- (ix) Each hutch should be lockable. One of the keys to the hutch should be labelled and kept at the Head teacher's office.

(b) **Doe**

- (i) During the first week of second term **each** candidate should be provided with a **pregnant** doe or **mature** doe of breeding age.
- (ii) The school should provide mature bucks reared separately to be used for mating the does that are not pregnant. The ratio of bucks to does should be 1 buck to 8 does.

- (iii) The school should make arrangements to acquire the rabbits in good time in order to give them to the candidates during the first week of second term.
- (iv) The schools are free to obtain rabbits from any source. The following possible sources may be contacted in good time:
  - District Livestock and Extension offices;
  - Agricultural Training Centres;
  - Agricultural Training institutes, colleges and universities;
  - Offices of the Director of Livestock Production, Nairobi.

**Note:** The procurement of rabbits is the responsibility of each school and not that of the Kenya National Examinations Council (KNEC).

(c) **Feeds**

- (i) Where the fodder is not readily available in the school, the school should make arrangements to provide the candidates with fodder.
- (ii) The school should provide enough concentrates to each candidate for feeding the rabbits.

3. After the candidates have been provided with hutches and rabbits, they should be instructed to:
  - (a) Write their Index Numbers clearly on their hutches.
  - (b) Rear the rabbits up to 12th week of second term.
  - (c) Keep records of the activities carried out and observations made during rearing period. The records should be made accessible to the Agriculture Teacher for assessment.
4. The Agriculture Teacher should assess each candidate's project three times, using the marking scheme provided by KNEC. The assessments should be done during the **5th, 8th and 11th weeks** of the second term. Each assessment should be out of **24 marks**. At the end of the 3rd assessment, the teacher should add up all the marks out of 72. The aspect of initiative/ originality should be assessed once; it carries a maximum of 8 marks, bringing the total score to 80 marks.
5. The Agriculture Teacher should assess each candidate's project report out of 20 marks using the guidelines provided by KNEC. All the marks for each candidate should be entered in the appropriate column on the assessment sheet.
6. The total score for each candidate should be transferred from the assessment sheet to the manual mark sheet. The Agriculture Teacher should ensure that the scores are entered in **ascending order of the Index Numbers**.

## **PROJECT B: PRODUCTION OF CABBAGES/KALES**

1. The project shall be carried out by candidates in form IV class between January and September 2017.
2. The schools should provide adequate seedlings to the candidates at the time of planting.
3. Each candidate should be allocated a piece of land measuring 4 m x 3 m on which to carry out the project. The plots should be uniform in soil characteristics and topography as much as possible. Paths not less than 50 cm wide should be left between the plots. The plots should be numbered according to the candidates' Index Numbers. The plots should be allocated to the candidates by the **end of January 2017**.
4. After plot allocation, candidates should be instructed to grow the crop up to harvesting stage by applying appropriate agronomic and management practices.
5. The Agriculture Teacher should assess each candidate's project at least four times using the marking scheme provided by KNEC.
6. The Agriculture Teacher should mark each candidate's project report out of 20 marks using the guidelines provided by KNEC. All the marks for each candidate should be entered in the appropriate column on the assessment sheet.
7. The total score for each candidate should be transferred from the assessment sheet to the manual mark sheet. The Agriculture Teacher should ensure that the scores are entered in **ascending order of the Index Numbers**.
8. The candidates should conclude and hand over the project to the school by **15th September 2017**.