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**KENYA NATIONAL EXAMINATION COUNCIL  
REVISION MOCK EXAMS 2016  
TOP NATIONAL SCHOOLS**

**BAHATI GIRLS HIGH SCHOOL  
AGRICULTURE  
PAPER 1  
TIME: 2 HOURS**

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443/1  
AGRICULTURE  
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TIME: 2HOURS

**BAHATI GIRLS HIGH SCHOOL KCSE TRIAL AND  
PRACTICE EXAM 2016**

**INSTRUCTIONS TO THE CANDIDATES:**

- Write your **name** and **index number** in the spaces provided.
- This paper consists of three section **A,B** and **C**
- Answer **all** the questions in section **A** and **B**
- Answer any **two** questions in section **C**.
- Answers should be written in the spaces provided in this booklet.
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***For Examiner's Use Only:***

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-17	30	
B	18-21	20	
C	22-24	40	
	TOTAL	90	

**SECTION A (30MKS)**

**Answer all questions in the spaces provided.**

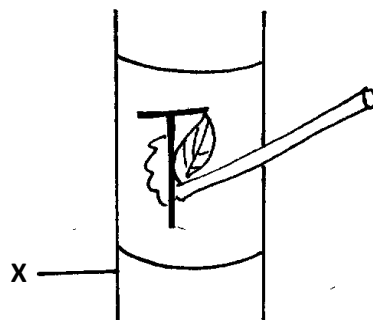
1. State **four** ways by which plant nutrients may be lost from the soil. (2mks)
2. State **two** characteristics of a good root stock for grafting (1mk)

3. Give **three** ways in which land consolidation help to promote sound farm management.(1½mks)
4. State **two** methods of controlling stalk borer. (1mk)
5. Mention **two** forms in which nitrogen is taken by plants. (1mk)
6. State **four** factors that should be considered when designing crop rotation programm (2mks)
7. State **four** advantages of drip irrigation (2mks)
8. Give **three** reasons for forage conservation. (1½mks)
9. Mention **four** aspects of rainfall that influence agriculture. (2mks)
10. Name **two** field practices carried out to obtain optimum plant population in a crop field. (1mk)
11. List **four** suitable sites for planting agro forestry trees (2mks)
12. State **four** factors to consider when deciding type of irrigation to use in the farm. (2mks)
13. List **four** benefits of packaging agricultural commodity (2mks)
14. Outline **four** information contained in an invoice (2mks)
15. State **four** ways of increasing soil fertility (2mks)
16. Give **four** reasons for proper drying of grains before storage. (2mks)
17. Name a chemical used to achieve the following drying water treatment 3mks)
  - a) Coagulation of solid particles
  - b) Softening of water
  - c) Killing of pathogens.

### **SECTION B**

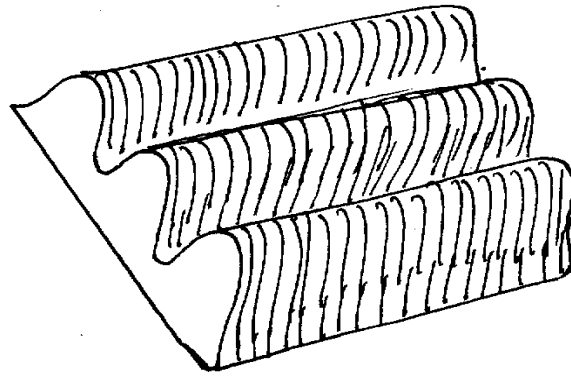
**Answer all questions in the spaces provided.**

18. The diagram below represents a method of crop propagation.

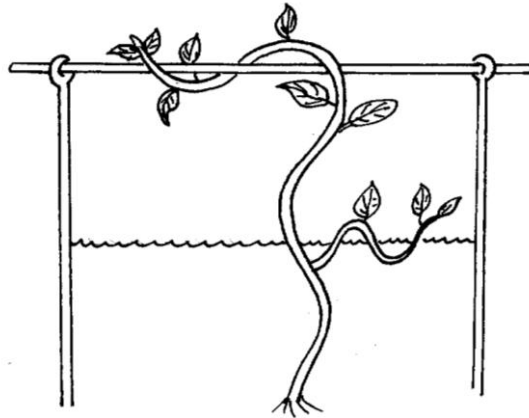


- a) Identify the method (1mk)
- b) State **two** uses of the adhesive tape in the practice. (2mks)
- c) Identify part labeled X (1mk)
- d) State **four** characteristics of part labeled X. (2mks)

19. The diagram below represents a ground surface after a tertiary operation.



- a) Identify the tertiary operation. (1mk)
- b) Give **two** types of crops that can be established on the structure above. (2mks)
- c) State **three** advantages of using above structure for growth of crops. (3mks)
20. The diagram below illustrates a field management practice. Study it carefully and answer the questions that follow:



- a) i) Identify the field practice (1mk)
- ii) Name **one** type of crop trained using the above method. (1mk)
- iii) Give **two** reasons for carrying out the practice. (2mks)
21. a) A farmer is to apply compound fertilizer 20:30:10 on a plot measuring 5m x 4m at the rate of 200kg per hectare. Calculate the amount of fertilizer the farmer would require for the plot. (2mks)
- b) What do the figures 30, and 10 in the fertilizer stand for (2mks)

### **SECTION C (40MARKS)**

#### **Answer any two questions in this section.**

22. a) Discuss the principle of cooperatives (10mks)
- b) A farmer is considering to undertake production of either cotton or beans. Study the following information about the two crops then answer the questions that follow.

#### **Cotton**

Yield per hectare	2500kg
Price	Ksh. 10/= per kg
Labour requirement per hacter	100 man day

Cost of labour	25/= per man days
Cost of seeds	100/= per hectare
Cost of SSP fertilizer	2000/= per hectare
Cost of spraying	500/= per hectare
Cost of S.A fertilizer	1500/= per hectare

**Beans**

Yield per ha	2000kg
Price	12/= per kg
Labour requirement per ha.	15man days
Cost of labour	25/= per man day
Cost of seeds	1000/= per ha.
Cost of SSP fertilizer	1500 per ha.
Cost of sprays	200/= per ha.

- a) Calculate gross margin for each crop. From your calculations, identify the crop the farmer should grow. (10mks)
23. b) Describe establishment and management of a pasture crop stand upto grazing time. (10mks)
- c) Discuss harmful effects of weeds on crops. (8mks)
- d) Classify Herbicides according to formulation. (2mks)
24. a) Explain cultural method used in controlling crop diseases. (10mks)
- b) Describe the production of dry beans under the following sub-headings.
- i) Weed control (3mks)
  - ii) Harvesting (3mks)
  - iii) Marketing (4mks)