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443/1

AGRICULTURE

Paper 1

JUNE – 2017

2 HOURS

JUNE TRIAL EXAMINATION 2017

443/1

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Paper 1

June -2017

2 Hours

Instructions to candidates

This paper has three sections **A** , **B** and **C**. Answer all questions in section A and B in the spaces provided.

Answer any Two questions in section **C** in the spaces provided.

For Examiners use only

Section	Question	Maximum Score	Candidates Score
A	1 -19		
B	20 – 22		
C			
	TOTAL		

SECTION A (30 Marks)

Answer all questions in this section in the spaces provided.

1 (a) What is a production function? (1mk)
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b) Name three types of production function. (1 ½ mks)
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.....

2 Give three disadvantages of shifting cultivation. (1 ½ mks)
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.....

3 Name two types of metal pipes used to convey water in the farm. (1mk)
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4 State four factors that determine seed rates in the farm. (2mks)
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5 List three methods of breaking seed dormancy. (1 ½ mks)
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6 Give four ways of improving labour productivity in a dairy farm. (2mks)
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7 State three reasons for treating water in the farm. (1 ½ mks)

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8 (a) Give four characteristics of crops grown for green manure. (2mks)

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(b) State four factors that determine the quality of farm yard manure. (2mks)

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9 List three forms in which water is available in the soil. (1 ½ mks)

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10 State four effect of soil structure on crop production. (1 ½ mks)

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11 State four most important aspects of rainfall that influence crop production. (2mks)

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12 What is biological weed control? (1mk)

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13 Give three reasons for mulching crops. (1 ½ mks)

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14 State three disadvantages of Tractor Hire services to farmers.(1 ½ mks)

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15 Outline three ways in which grass help conserve soil. (1 ½ mks)

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16 State four disadvantages of communal land tenure system. (2mks)

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17 Why is it advisable to apply a nitrogenous fertilizer to a crop of maize at Knee height or at the height of 30cm – 45cm. (½mk)

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18 Give two signs of blight disease in a field of tomatoes. (1mk)

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.....

19 Name the storage organ used to propagate the following plants

(i) Sisal (½ mk)

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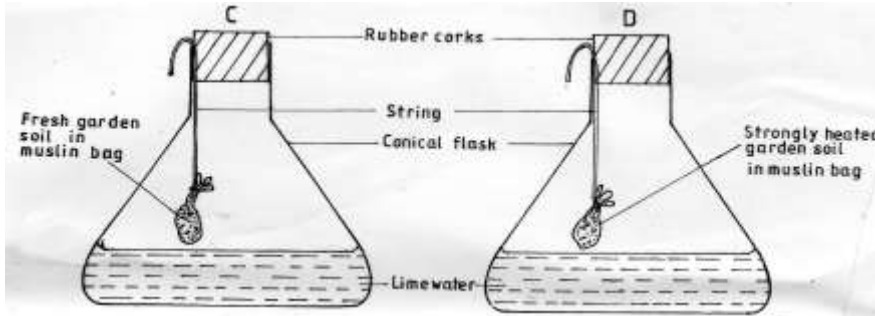
(ii) Pyrethrum. (½ mk)

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SECTION B (20 Marks)

Answer all questions in this section in the spaces provided

19 The diagram below show a set of an experiment to study an aspect of soil. The set up was left undisturbed for twenty four hours (24hrs). Study it and answer the questions that follow.



(a) What was the aim of the experiment? (1mk)

.....

(b) State one observation that was made in each conical flasks labeled **C** and **D**. (1mk)

.....

(c) Give a reason for each of your answers in (b) above. (2mks)

C.....

D.....

20 Below is a diagram of a crop pest. Study it and answer questions that follow.



(i) Identify the pest. (1mk)

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(ii) Name two parts of crop damaged by the pest above. (1mk)

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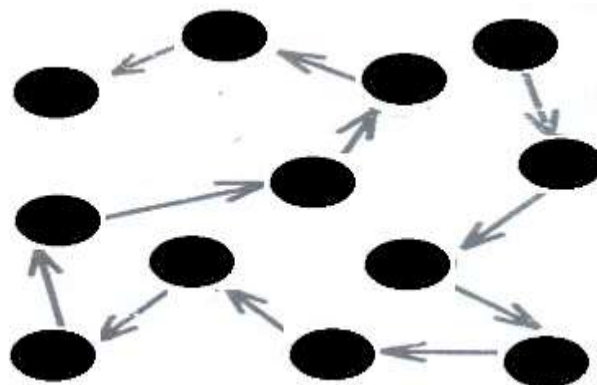
(iii) Give three methods of controlling the above pest. (3mks)

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21 (a) A farmer has 9 acres of land in which 3 acres are under tea. 3 acres is fallow. He wants to establish cotton in the remaining 3 acres. Casual labour hiring would demand 40 man- days per acre at 100/= per man – day. Hiring a tractor would cost ksh. 1,800/= per acre. Use of a tractor would improve cotton yield from 600kgms to 750kgms. Seed cotton per acre worth ksh.40/= per kgm if well cultivated and timely planted. Harvesting costs kshs. 100/= per 100kgms seed cotton. Prepare a partial budget indicating whether the change is worthwhile or not. (5mks)

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22 Study the illustration below and answer questions that follow.



Identify the method of soil sampling illustrated above. (1mk)

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SECTION C (40 Marks)

Answer any Two questions in this section in the spaces provided.

23 (a) State five pieces of information contained in a receipt. (5mks)

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(b) Describe the process of transplanting a cabbage seedling. (5mks)

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(c) State and explain five factors that influence supply of cabbages in a market. (10mks)

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