P515/3

Principles and practices

Of Agriculture.

PAPER 3

MOCKS 2024

AUGUST

MEBU EXAMINATIONS CONSULT

Uganda Advanced Certificate Of Education

MOCK EXAMINATIONS 2024

Principles & Practices of Agriculture.

PAPER 3

(PRACTICAL)

Time: 2 Hours

INSTRUCTIONS TO CANDIDATES

This paper consists of five questions.

Answer all questions.

The answers are to be written in the spaces provided.

FOR EXAMINER'S USE ONLY	
QUESTIONS	**MARKS**
1	
2	
3	
4	
5	
TOTAL	

1. You are provided with specimens K1 to K6.

(a).Name the operation where they are used. (1 mark)

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(b).Mention three reasons for having the above named structure on the farm. (3marks)

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(c).Describe the procedure of using the specimens to carry out the named operation. (3 marks)

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(d).Describe the adaptions of the following specimens to their functions. (3 marks)

K1.....

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K2.....

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K3.....

2. You are provided with specimens P and Q which are a common animal product. Measure 60cm^3 of specimen P in a cylinder.

a) Immerse the lactometer into the specimen with the bulb end at the bottom. Repeat the procedure to obtain the readings for specimen Q and record your observations. (2 marks)

Specimen P

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Specimen Q:

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(b).To 60cm^3 of specimen P in a cylinder, add one spatula endful of Specimen R. Stir to mix uniformly and leave the mixture to stand for 2 minutes. Pour the mixture into a funnel lined with a filter paper, placed onto the measuring cylinder. Allow the set up to stand for 5 minutes and record your observations in the table below.

Follow the steps above to obtain results for specimen Q. (3 marks)

Specimen	Volume of filtrate	Volume of solid
P		
Q		

c).i)State the effect of adding specimen R to the milk samples. (1 mark)

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ii)Explain your results obtained for both specimens. (2 marks)

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(iii).State four factors that affect milk composition. (2 marks)

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3. You are provided with specimens T1 to T4.

(a).Name the product prepared from the specimens. (1 marks)

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(b).Describe the procedure of using the specimens to obtain the above named product. (4 marks)

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(c).State four factors that influence quality of the product obtained from the specimens. (2 marks)

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(d).Give three advantages of using the above mentioned product in crop fields. (3 marks)

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4. Obtain 5 mls of each solution of S1, S2 and S3 respectively in separate 10mls funnels. Use a cork borer to cut out 3 cylinders of 3cm long from specimen Z and immerse them into the three respective solutions. Allow the set up to stand for 20 minutes. Remove the tissues and measure their length again.

a) Record your results below. Length of tissue from; (3marks)

S1.....

S2.....

S3.....

(b).Explain your results. (3 marks)

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(c).Identify the field conditions which can cause similar conditions as observed in each tissue from respective solutions. (2 marks)

S1.....

S3.....

d).i) Name the physiological process demonstrated in the experiment. (1 marks)

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ii) State three importance of the above named physiological process in plant growth. (3marks)

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5. You are provided with specimens L1 and L2. Measure 50cm^3 of specimen L1 and put it into a funnel lined with a filter paper which has been placed onto a measuring cylinder. Add 60cm^3 of water and start the stop clock. Record your observations in the table below. Repeat the steps to obtain results for soil sample L2. (3 marks)

Specimen	Volume of water collected after every 30 seconds			
	30	60	90	120
L1				
L2				

Present your information on a graph. (3 marks)

Explain your results. (3 marks)

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State two ways of modifying drainage for soil sample L1. (1 mark)

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END