

NAME.....INDEX NO.....

SIGNATURE.....

527/1
PRINCIPLES AND
PRACTICES OF AGRICULTURE
Paper 1
(Theory)
July/August 2009
2 Hours 30 Minutes

WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education
PRINCIPLES AND PRACTICES OF AGRICULTURE
Paper 1
(Theory)
2 Hours 30 Minutes

INSTRUCTIONS

- Answer **all** questions in part A and **4 (four)** questions from part B including at least **one** from section I, II, III.

FOR EXAMINERS' USE ONLY

PART/QUESTION	MARKS	EXAMINER'S NO AND SIGN.
Part A		
Part B Qn		
Qn		
Qn		
Qn		
TOTAL		

PART A (20 MARKS)

Write the letter corresponding to the best answer in the box for question 1 and write your answers in the spaces provided for questions 2 – 3.

1. (a) Which one of the following disease is treated using a trocar and cannula ?

- A. Bloat (C) Mastitis
B. Calf scours (D) Grass tetany.

(b) A soil which has more hydrogen ions than hydroxyl ions is

- A. Neutral (C) Acidic
B. Alkaline (D) Highly fertile

(c) Gross margin is

- A. Out put minus variable costs.
B. Total assets minus total liabilities.
C. Total sales minus receipts.
D. Total costs minus variable costs.

(d) A dip stick is a farm implement used for

- (A) Determining the concentration of acaricide in a dip tank.
(B) Determining the depth of an oil sump.
(C) Determining the level of electricity in a battery.
(D) Determining the level of oil in sump.

(2 marks)

2. State four (4) precautions taken while dipping livestock.

(4 marks)

- (i)
(ii)
(iii)
(iv)

3. (a) State the functions of the electrical system of a tractor .

(3 marks)

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(b) What are the effects of an inefficient cooling system? (3 marks)

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4. Give four reasons for using vegetative parts in crop propagation. (4 marks)

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5. Describe the role played by micro organism in soil fertility. (2 marks)

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(b) Give four characteristics of a good soil for crop production. (2 marks)

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PART B (80 MARKS)

SECTION I

MECHANIZATION AND FARM MANAGEMENT

6. (a) What is agriculture credit? (2 marks)

(b) Give 4 sources of agriculture credit. (4 marks)

(c) What is the role played by agriculture credit in agriculture production? (6 marks)

(d) Give the problems that farmers encounter while using credit. (8 marks)

7. (a) Explain the factors that may influence the performance of farm equipment and tools. (10 marks)
 (b) State the ways of maintaining farm tools and equipment in good working condition. (5 marks)
 (c) Give four tools that may be important when making a nursery bed. (5marks)
8. (a) What are the characteristics of a good site for a farm building? (8 marks)
 (b) What is the importance of farm buildings? (6 marks)
 (c) State the factors that may determine the design of a farm building. (6marks).

SECTION II CROP PRODUCTION

9. (a) Explain the factors that may determine the rate of soil formation. (10 marks).
 (b) Describe the determinants of soil fertility. (10 marks)
10. (a) State five signs of disease in crops. (7 marks)
 (b) Mention the ways through which crop diseases spread. (8 marks)
 (c) Describe the steps taken by farmers to reduce the spread of crop diseases. (7marks)
11. (a) What are the desirable features of a good pasture plant? (8 marks)
 (b) Describe the steps taken to establish a hay pasture. (8 marks)
 (c) What are the advantages of feeding livestock on pastures. (4 marks)

SECTION III ANIMAL PRODUCTION

12. (a) Describe the ways of maintaining a high breeding efficiency in a herd. (8marks).
 (b) State the factors considered in selecting animals for a breeding program. (8 marks)
 (c) What are the merits of inbreeding as a breeding method? (4 marks)
13. (a) State the characteristics of a good pig sty. (8 marks)
 (b) Explain the management practices carried out on a sow during farrowing. (6 marks)
 (c) What challenges do pig farmers face? (6 marks)
14. (a) Explain the factors that may determine the quality of hides and skins. (10 marks)
 (b) Mention the steps taken in preparing hides and skins for the market. (6 marks)
 (c) Give four uses of hides and skins. (4 marks)

END.

NAME: Index No.....

SCHOOL: Signature:

527/1
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
Paper 1
July/August 2011
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- Attempt **all** questions in Part A and **four** in section B, choosing at least **one** Question from each of the sections I, II, III.

FOR EXAMINER'S USE		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
Qn.		
Qn.		
Qn.		
Qn.		
TOTAL		

SECTION A

- 1 a) Which of the following constitutes the soil space?
A. Air and living organisms.
B. Soil air and soil particles.
C. Air and water.
D. Soil particles and water. ☐
- b) Oxytocin hormone is responsible for
A. Milk production.
B. Milk letdown.
C. Contraction of the penis during mating.
D. Milk hold up. ☐
- c) A piece of truss that holds the rafter in position and placed nearer to the barge is the;
A. Tie beam.
B. Strut.
C. Rafter bracket.
D. Barge board. ☐
- d) When making a balanced sheet, prepaid expenses are placed under.
A. Assets.
B. Closing evaluation.
C. Liabilities.
D. implicit costs. ☐

2. Mention four methods of putting waste land to full use. (04mks)

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3. a) What is meant by a Profit and Loss account? (02mks)

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b) State at least four features of a good Profit and Loss account. (04 mks)

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4. Give four criteria to use when identifying a good stock man (04mks)

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5. Give three ways in which farm water may be kept clean and safe for use. (03mks)

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PART B (80MKS)

SECTION I MECHANISATION AND FARM MANAGEMENT

- 6 a) State the characteristics of agriculture products. (6mks)
b) Explain the factors affecting the supply of agriculture products. (14mks)
- 7 a) Give six materials used in constructing farm buildings (06mks)
b) Explain the factors to consider when selecting a site for farm buildings. (14mks)
- 8 a) Explain the structural difference between a disc plough and mould board plough (10mks)
b) How can a farmer maintain a mould board plough in a good working condition. (06mks)
c) State any four conditions that favour use of ox ploughs. (04mks)

SECTION II CROP AND SOIL SCIENCE.

- 9 a) Describe how you would make quality compost manure using a heap method. (06mks)
b) State the factors that affect the response of crops to fertilizers. (14mks)
- 10 a) State the mechanical methods of controlling soil erosion. (8mks)
b) Explain the factors that may influence the rate of erosion in an area. (12mks)
- 11 a) State the importance of phosphorus in crop production. (05mks)
b) Outline the deficiency symptoms of phosphorus. (05mks)
c) Give ways how phosphorous is lost from the soil. (05mks)
d) Mention any five factors that may lead to increase in nutrients loss from soils. (05mks)

SECTION III ANIMAL SCIENCE

- 12 a) State the abnormalities that occur in eggs. (06mks)
b) Explain the various ways through which good quality eggs can be produced. (14mks)
- 13 a) State the signs of heat in goats. (08mks)
b) Explain how you can manage a pregnant goat up to kidding (12mks)
- 14a) What are the factors considered when selecting animals for a breeding programme. (8mks)
b) Explain the various methods used to select a breeding stock. (12mks)

- END -

Name: Index No.....

School: Signature:

527/1
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
(Theory)
Paper 1
July/August 2013
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- Attempt all questions in section A and four questions in section B, choosing at least one question from each of the sections I, II, III of section B.

FOR EXAMINER'S USE ONLY		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
PART B Qn.		
Qn.		
Qn.		
Qn.		
TOTAL		

SECTION A: (20MARKS)

Answer **all** questions in this part. For **question 1**, write the letter corresponding to the most correct answer in the box provided. For questions **2 to 5**, write all answers in the spaces provided.

1. a) What is meant by seed inoculation in pasture establishment?
A. Breaking seed dormancy of pasture seeds.
B. Promoting nitrogen fixation in pastures.
C. Encouraging easy rooting in seeds.
D. Protecting seeds from pest attack. ☐
- b) What is the function of a compression stroke in a petrol engine?
A. Vapourising fuel-air mixture.
B. Mixing of fuel-air mixture.
C. Raising temperature of fuel-air mixture.
D. Expansion of fuel-air mixture. ☐
- c) Which of the following hormones initiate milk let down?
A. Prolactin
B. Lactogen
C. Adrenalin
D. Oxytocin ☐
- d) The initial process in mechanism of soil erosion is
A. dislodging of soil particles.
B. destruction of soil particles.
C. splashing of soil particles.
D. transportation of soil particles. ☐

(02mks)

2. State **five** benefits of agro-forestry as a farming practice.

(05mks)

- i) _____
ii) _____
iii) _____
iv) _____
v) _____

3. Give **four** ways in which farmers improve profit margins on their farms. (04mks)

- i) _____
ii) _____
iii) _____
iv) _____

4. State **four** reasons for lubricating farm machines. (04mks)

- i) _____
- ii) _____
- iii) _____
- iv) _____

5. State **five** ways in which the quality of milk may be lowered.

- i) _____
- ii) _____
- iii) _____
- iv) _____
- v) _____

(05mks)

SECTION B: 80 MARKS.

*Answer any **four** questions from this section choosing at least **one** from each of the sections **I, II, III.***

SECTION I

MECHANISATION AND FARM MANAGEMENT.

6. a) Why is a tractor important on the farm? (06mks)

b) State the differences between a petrol and diesel engine. (14mks)

7. a) What are the features of a good plunge dip? (05mks)

b) Describe how dipping is achieved using a plunge dip? (10mks)

c) What factors affect the effectiveness of dipping? (05mks)

8. a) Why should farmers get agricultural credit? (04mks)

b) Suggest reasons why farmers fail to pay back credit extended to them. (10mks)

c) How can credit be made more effective in farming? (06mks)

Turn Over

SECTION II
CROP PRODUCTION

9. a) Why should farmers drain their farmland? (08mks)
b) Describe the different methods used in draining land. (12mks)
10. a) Name four inorganic fertilizers that contain Nitrogen. (04mks)
b) What are the uses of Nitrogen in crop growth? (04mks)
c) Describe the methods used when applying fertilizers in crop production. (12mks)
11. a) Name and describe the types of water erosion. (08mks)
b) Explain the factors that encourage erosion. (12mks)

SECTION III
ANIMAL PRODUCTION

12. a) What are vices? (02mks)
b) State the different vices among birds. (04mks)
c) How can vices be controlled in a poultry house? (14mks)
13. a) Describe the stages through which a hide is obtained from a cow up to storage. (12mks)
b) How can farmers ensure production of high quality hides and skins? (08mks)
14. a) Why are ticks a problem in animal production? (05mks)
b) Describe how tick control can be achieved through hand spraying. (12mks)
c) State the common diseases spread by ticks. (03mks)

- END -

Name: Index No.....
 School: Signature:

527/1
 PRINCIPLES
 AND PRACTICES
 OF AGRICULTURE
 (Theory)
 Paper 1
 July/August 2015
 2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS
 Uganda Certificate of Education
PRINCIPLES AND PRACTICES OF AGRICULTURE
Paper 1
THEORY
 2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- Answer all questions in section A and four questions in section B, choosing at least one question from each of the sections I, II, III of section B.

FOR EXAMINER'S USE ONLY		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
PART B No.		
No.		
No.		
No.		
TOTAL		

PART A: 20 MARKS

Answer **all** questions in this part.

For question 1 write the letter corresponding to the best answer, in the boxes provided and for question 2 to 5, write the answers in the spaces provided.

1. (a) What causes brown streak disease in Cassava?

- A. Bacterium
- B. Aphid
- C. Virus
- D. Fungus

☐

(b) Which one of the following is a deficiency disease?

- A. Milk
- B. Bloat
- C. Trypanosomiasis
- D. Heart water.

☐

(c) How can price fluctuation be solved?

- A. Through transport improvement.
- B. Through market diversification.
- C. Through advertisement.
- D. Through production diversification.

☐

(d) How can the concentration of acaricide be lowered in a dip?

- A. Through dipping on a rainy day.
- B. Through over using the acaricide.
- C. Through replenishing regularly.
- D. Through leaving the drainage pipe open.

☐

(02 marks)

2. (a) Mention **three** conditions that make the animals suffer from bloat. (03 marks)

- (i)
- (ii)
- (iii)

(b) State **two** methods that can be used to treat bloat. (02 marks)

- (i)
- (ii)

3. Outline **five** factors that affect the demand of the commodity. (05 marks)
- (i)
 - (ii)
 - (iii)
 - (iv)
 - (v)
4. State **four** functions of lubricants in farm machines. (04 marks)
- (i)
 - (ii)
 - (iii)
 - (iv)
5. Give reasons for pruning crops. (04 marks)
- (i)
 - (ii)
 - (iii)
 - (iv)

PART B: (80 MARKS)

Answer **four** questions from this section including at least **one** from each section.

SECTION I

MECHANISATION AND FARM MANAGEMENT.

6. (a) State the activities involved in the marketing of agricultural produce. (10 marks)
- (b) Outline the problems of marketing Agricultural produce. (10 marks)
7. (a) Why is a tractor important on a farm? (08 marks)
- (b) State the differences between petrol engines and diesel engines. (12marks)
8. (a) Describe the features of a good calf pen. (14 marks)
- (b) Why is a crush important on a farm? (06 marks)

SECTION II
CROP PRODUCTION

9. (a) Distinguish between seed dormancy and seed viability. (02 marks)
(b) State the main causes of seed dormancy. (06 marks)
(c) Describe the various methods used to break seed dormancy. (12 marks)
10. (a) State the characteristics of a good green manure crop. (06 marks)
(b) Describe how green manure is prepared on the farm. (10 marks)
(c) State the advantages and limitations of using green manure. (04 marks)
11. (a) State the qualities of a good pasture species. (08 marks)
(b) Describe how pastures can be improved. (12 marks)

SECTION III
ANIMAL PRODUCTION

12. (a) State the objectives of breeding farm animals. (10 marks)
(b) Describe the methods farmers use to maintain a high breeding efficiency. (10 marks)
13. (a) Describe how you can use a surgical method to castrate a calf. (12 marks)
(b) Why is castration carried out on a farm? (08 marks)
14. (a) State the characteristics of a good layer. (06 marks)
(b) State the advantages and disadvantages of a deep litter system. (14 marks)

- END -

Name: Index No.....

School: Signature:

527/1
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
(Theory)
Paper 1
July/August 2014
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- Answer all questions in section A and four questions in section B, choosing at least one question from each of the sections I, II, III of section B.

FOR EXAMINER'S USE ONLY		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
PART B Qn.		
Qn.		
Qn.		
Qn.		
TOTAL		

SECTION A: (20MARKS)

For question 1, write the letter corresponding to the most correct answer in the box provided. For questions 2 to 5, write all answers in the spaces provided.

1. (a) Which of the following nutrients is most important in the development of flowers, seeds and fruits?
A. Nitrogen.
B. Potassium.
C. Magnesium.
D. Sulphur.
- (b) Disconnection of power from the engine to the drive shaft is achieved by the use of
A. Gear box.
B. Differential.
C. Connecting rod.
D. Clutch.
- (c) What term is given to the difference between total income and total variable costs?
A. Gross margin.
B. Net capital.
C. Gross profit.
D. Net profit.
- (d) Selection of animals for breeding basing on performance of ancestors is termed as
A. Progeny testing.
B. Tandem selection.
C. Pedigree selection.
D. Mass selection.

(02 marks)

2. Give any five objectives for improving crops.

(05marks)

- i) _____
ii) _____
iii) _____
iv) _____
v) _____

3. (a) State any two signs of mastitis in a cow. (02marks)

- i) _____
- ii) _____

(b) How can farmers reduce the spread of mastitis on their farms? (02marks)

- i) _____
- ii) _____

4. Suggest four ways in which prices of products are determined in a market? (04marks)

- i) _____
- ii) _____
- iii) _____
- iv) _____

5. (a) State five conditions that favour use of Ox-plough cultivation. (05 marks)

- i) _____
- ii) _____
- iii) _____
- iv) _____
- v) _____

SECTION B (80 MARKS)

SECTION J

MECHANISATION AND FARM MANAGEMENT

6. (a) Why are agricultural produce processed before sale? (06marks)

(b) Explain the factors affecting the supply of agricultural products.

(14marks)

7. (a) Why are diesel engine tractors commonly used on the farm than petrol engine tractors? (06marks)

(b) What are the benefits of mechanizing agricultural production?

(14marks)

8. (a) What are the reasons for having a store on the farm? (06marks)

(b) Explain the factors to consider when siting farm buildings. (14marks)

Turn Over

SECTION II
CROPS AND SOILS.

9. (a) State the characteristics of a good vegetable crop to grow. (08marks)
(b) Describe how to determine viability of a seed lot using the germination test. (12marks)
10. (a) Suggest reasons for the popularity of chemical weed control method. (10marks)
(b) What precautions should farmers take when applying herbicides? (06marks)
(c) State the factors affecting the effectiveness of herbicides. (04marks)
11. (a) Describe how silage is prepared on the farm. (10marks)
(b) Outline the factors affecting the quality of silage. (05marks)
(c) State the precautions taken when preparing silage. (05marks)

SECTION III
ANIMAL PRODUCTION.

12. (a) State the features of a good calf pen. (06marks)
(b) Describe how a calf is trained to drink from a bucket. (10marks)
(c) State the advantages of bucket feeding. (04marks)
13. (a) How is an egg formed in a hen? (07marks)
(b) State the abnormalities that occur during egg formation. (07marks)
(c) What are the characteristics of a good egg? (06marks)
14. (a) Why are parasites a problem in livestock farming? (06marks)
(b) Describe the life cycle of liver fluke. (10 marks)
(c) How can liver fluke be controlled on the farm? (04marks)

- END -

Name: Index No.....

School: Signature:

527/1
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
(Theory)
Paper 1
July/August 2017
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

THEORY

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- Answer all questions in part A and four questions in part B, choosing at least one question from each of the sections I, II, III of part B.

FOR EXAMINER'S USE ONLY		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
PART B; No.		
No.		
No.		
No.		
TOTAL		

PART A: 20 MARKS

Answer **all** questions in this part.

For question 1, write the letter corresponding to the correct answer in the box on the right.
For questions 2 to 5, write the answers in the spaces provided.

1. (a) Why are cereal crops the most produced in many parts of the world?
- A. Highly nutritive.
 - B. Popular amongst farmers.
 - C. Tolerant to drought.
 - D. Adapted to different soils and climates.
- ☐
- (b) Which one of the following parts of the digestive system of a ruminant does digestion of proteins begins?
- A. Rumen.
 - B. Omasum.
 - C. Abomasum.
 - D. Reticulum.
- ☐
- (c) What is gross margin?
- A. The difference between total output and variable costs.
 - B. The difference between assets and liabilities.
 - C. The difference between sales and expenses.
 - D. The difference between fixed costs and variable costs.
- ☐
- (d) Which of the following may cause the engine to produce a lot of smoke?
- A. Dirty spark plug.
 - B. Worn out piston rings.
 - C. Faulty choke valve.
 - D. Low level of oil in the sump.
- ☐

(02 marks)

2. State **four** reasons for drying crop seeds before storage.

(04 marks)

- (i)
- (ii)
- (iii)
- (iv)

3. State **five** ways in which diseases in farm animals can be prevented. (05 marks)

- (i)
- (ii)
- (iii)

- (iv)
- (v)
4. Mention **four** possible causes of overheating in a tractor engine. (04 marks)
- (i)
- (ii)
- (iii)
- (iv)
5. Why are farmers advised to keep farm records? (05 marks)
- (i)
- (ii)
- (iii)
- (iv)
- (v)

PART B (80 MARKS)

Answer any **four** questions from this part, choosing at least **one** from each section.
Write your answers in the answer booklet/sheets provided.

SECTION I.

MECHANISATION AND FARM MANAGEMENT.

6. (a) What are the benefits of being a member of a co-operative society? (06 marks)
- (b) State the principles on which co-operatives operate. (06 marks)
- (c) What led to the collapse of co-operatives in Uganda? (08 marks)
7. (a) What are the features of a good wet type (oil bath) air cleaner? (06 marks)
- (b) State the functions of the various features in clean air production. (07 marks)
- (c) How can the wet type (oil bath) air cleaner be serviced to perform well? (07 marks)

Turn Over

8. (a) Describe how a spray race is used in tick control. (06 marks)
(b) State the advantages of using a spray race in tick control. (10 marks)
(c) How can a spray race be maintained? (04 marks)

SECTION II

CROP PRODUCTION

9. (a) State the factors affecting soil formation. (05 marks)
(b) Describe the characteristics of a fertile soil. (10 marks)
(c) Suggest the farming practices that maintain soil fertility. (05 marks)
10. (a) Why are weeds a problem in farming? (06 marks)
(b) State the characteristics that make weeds more successful than crop plants. (08 marks)
(c) What are the advantages of chemical weed control? (06 marks)
11. (a) State the reasons for crop improvement. (06 marks)
(b) Explain the field practices that lead to increased crop yields. (14 marks)

SECTION III

ANIMAL PRODUCTION.

12. (a) State the characteristics of a good quality egg. (06 marks)
(b) Describe the management practices to carry out to produce good quality eggs. (14 marks)
13. (a) Why are farm animals dehorned? (06 marks)
(b) Describe how to dehorn a calf using potassium hydroxide. (14 marks)
14. (a) With the aid of a diagram, describe the life cycle of a two host tick. (12 marks)
(b) Why are ticks a problem to livestock farmers? (04 marks)
(c) Outline the non-chemical methods used in tick control. (04 marks)

- END-

NAME: Index No.....

SCHOOL: Signature:

527/1
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
Paper 1
July/August 2011
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 hours 30 minutes

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- Attempt **all** questions in Part A and **four** in section B, choosing at least one Question from each of the sections I, II, III.

FOR EXAMINER'S USE		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
Qn.		
Qn.		
Qn.		
Qn.		
TOTAL		

SECTION A

- 1 a) Which of the following constitutes the soil space? ☐
- A. Air and living organisms.
 - B. Soil air and soil particles.
 - C. Air and water.
 - D. Soil particles and water.
- b) Oxytocin hormone is responsible for ☐
- A. Milk production.
 - B. Milk letdown.
 - C. Contraction of the penis during mating.
 - D. Milk hold up.
- c) A piece of truss that holds the rafter in position and placed nearer to the barge is the; ☐
- A. Tie beam.
 - B. Strut.
 - C. Rafter bracket.
 - D. Barge board.
- d) When making a balanced sheet, prepaid expenses are placed under. ☐
- A. Assets.
 - B. Closing evaluation.
 - C. Liabilities.
 - D. implicit costs.

2. Mention four methods of putting waste land to full use. (04mks)

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3. a) What is meant by a Profit and Loss account? (02mks)

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- b) State at least four features of a good Profit and Loss account. (04 mks)

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4. Give four criteria to use when identifying a good stock man (04mks)

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5. Give three ways in which farm water may be kept clean and safe for use. (03mks)

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PART B (80MKS)

SECTION I MECHANISATION AND FARM MANAGEMENT

- 6 a) State the characteristics of agriculture products. (6mks)
b) Explain the factors affecting the supply of agriculture products. (14mks)
- 7 a) Give six materials used in constructing farm buildings (06mks)
b) Explain the factors to consider when selecting a site for farm buildings. (14mks)
- 8 a) Explain the structural difference between a disc plough and mould board plough (10mks)
b) How can a farmer maintain a mould board plough in a good working condition. (06mks)
c) State any four conditions that favour use of ox ploughs. (04mks)

Turn Over

SECTION II CROP AND SOIL SCIENCE.

- 9 a) Describe how you would make quality compost manure using a heap method. (06mks)
b) State the factors that affect the response of crops to fertilizers. (14mks)
- 10 a) State the mechanical methods of controlling soil erosion. (8mks)
b) Explain the factors that may influence the rate of erosion in an area. (12mks)
- 11 a) State the importance of phosphorus in crop production. (05mks)
b) Outline the deficiency symptoms of phosphorus. (05mks)
c) Give ways how phosphorous is lost from the soil. (05mks)
d) Mention any five factors that may lead to increase in nutrients loss from soils. (05mks)

SECTION III ANIMAL SCIENCE

- 12 a) State the abnormalities that occur in eggs. (06mks)
b) Explain the various ways through which good quality eggs can be produced. (14mks)
- 13 a) State the signs of heat in goats. (08mks)
b) Explain how you can manage a pregnant goat up to kidding (12mks)
- 14a) What are the factors considered when selecting animals for a breeding programme. (8mks)
b) Explain the various methods used to select a breeding stock. (12mks)

- END -

NAME:

Index No.....

SCHOOL:

Signature:

527/1
PRINCIPLES
AND PRACTICES
OF AGRICULTURE
(Theory)
Paper 1
July/August 2012
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- Attempt all questions in section A and four in section B, choosing at least one Question from each of the sections I, II, III of section B.

FOR EXAMINERS' USE ONLY		
QUESTIONS	MARKS	EXAMINER'S NUMBER
PART A		
Qn.		
Qn.		
Qn.		
Qn.		
TOTAL		

SECTION A

Answer **all** questions in this part. For **question 1**, write the letter corresponding to the correct answer in the box provided. For questions **2 to 5**, write all answers in the spaces provided.

1. a) Why is ballasting done on tractor tyres?
A. To increase the amount of pressure in the tyre.
B. To cool the tractor tyres.
C. To increase traction
D. To reduce friction. ☐
- b) Which of the following hormones is secreted by corpus luteum?
A. Progesterone
B. Luteinising hormone
C. Follicle stimulating hormone
D. Prolactin. ☐
- c) What do pre-paid expenses represent in farm accounting?
A. Liabilities
B. Assets
C. Gross Margin
D. Explicit cost. ☐
- d) How can mealy bugs and aphids be controlled on crop plants?
A. Use of nematicides
B. Use of systemic fungicides
C. Use of fumigants
D. Use of systemic insecticides. ☐

(02Marks)

2. What are the benefits of planting crops at the start of the rainy season?

(04Marks)

- (i)
- (ii)
- (iii)
- (iv)

3. State five benefits of being a member of a co-operative society? (05 marks)

- (i)
- (ii)
- (iii)

(iv)

(v)

4. a) What are the functions of the gear box in the transmission system of a tractor? (03 marks)

(i)

(ii)

(iii)

b) Mention two other parts of the transmission system of a tractor. (02 marks)

(i)

(ii)

5. How are tape worms adapted to their parasitic life? (04marks)

(i)

(ii)

(iii)

(iv)

SECTION B: 80 MARKS.

Answer any four questions from this section choosing at least one from each section.

SECTION I

MECHANISATION AND FARM MANAGEMENT.

6. a) Why is wood commonly used as a fencing material? (06 marks)

b) Describe the following methods of wood treatment for fencing.

(i) Hot and cold soaking (05 marks)

(ii) Sap displacement. (05 marks)

(ii) Vaccum treatment. (04 marks)

7. a) What are the advantages of using a disc plough in land preparation? (10 marks)
- b) Describe how you can maintain a disc plough after a season's work. (10 marks)
8. a) Explain the problems of high population density on agricultural production. (14 marks)
- b) State how land tenure systems have affected agricultural production. (06 marks)

SECTION II

CROP PRODUCTION

9. a) State the different ways through which crop diseases spread. (08 marks)
- b) Explain how crop diseases can be controlled on the farm. (12 marks)
- 10.a) Why is maize growing popular in Uganda? (08 marks)
- b) Describe how a crop of maize can be raised from land preparation up to weeding. (12 marks)
- 11.a) State the factors influencing soil formation. (06 marks)
- b) Describe the characteristics of a fertile soil. (08 marks)
- c) How is soil fertility lost? (06 marks)

SECTION III

ANIMAL PRODUCTION

- 12.a) How does a hen digest its food? (12 marks)
- b) State the problems faced by poultry farmers in Uganda. (08 marks)
- 13.a) Why are most dairy farmers using artificial insemination as a breeding method? (14 marks)
- b) Suggest ways in which Artificial Insemination can be made more popular among farmers. (06 marks)
- 14.a) Describe the process of milk hold up in a lactating cow. (10 marks)
- b) Explain the factors affecting milk yield in a lactating cow. (10 marks)

- END -