

S.4 AGRICULTURE GUIDING QUESTIONS

CROP PRODUCTION

1. (a) Explain the considerations when choosing an irrigation method to use on a farm.
b) Outline the importance of irrigation in farming.
2. (a) State the effects of pests on crops.
b) Explain the practical cultural methods used in controlling pests.
3. (a) Describe the factors that affect the type of fertilizer to apply in the field.
b) Outline the management practices you would perform while raising seedlings in a nurserybed.
- 4(a) Explain the factors that influence the number of soil living organisms in the soil.
(b) Give the importance of soil living organism.
- 5(a) Outline advantages and disadvantages of using Organic Manure.
(b) Explain the factors that affect the response of crops to fertilizers.
- 6(a) Outline reasons for carrying out soil sampling.
(b) Describe the procedure of carrying out soil sampling for laboratory analysis.
- 7 a) What are the benefits of using farm yard manure
b) Describe how good Quality FYM is prepared on the farm
- 8 a) What considerations should a farmer make when grafting
b) Describe the advantages and disadvantages of grafting as a method of propagation.
- 9 a) Outline the damages caused by pests on crops during growth.
b) Explain ways in which crop pests can be controlled
- 10 a) State the importance of vegetable production
b) Explain how one can raise tomato seedlings in a nursery bed up to transplanting stage.
- 11 a) State the advantages and disadvantages of using seeds in crop propagation
b) Mention the qualities of a good seeds in crop propagation
C) Suggest measures that can be taken to increase seed germination percentage.
- 12 a) Explain the effects of insect pests on growing crops.
b) Explain how cultural measures can be used in controlling crop pests.
- 13 a) Discuss the farming practices under which soil erosion is likely to be encouraged.

- b) Explain the cultural methods of soil and water conservation.
- 14 a) What are the factors to consider when selecting seeds for planting
- b) Describe a named experiment to determine germination percentage of a seed lot.
- 15 a) Why are farmers encouraged to use organic manures in crop growing
- b) Describe how good quality composite manure can be prepared using the pit method.
- 16 a) Why are pests a problem in farming
- b) Explain the cultural methods used in pest control.
- 17 a) Describe how a nurserybed for tomatoes can be prepared
- b) Why have farmers continued to grow vegetables.

SECTION II

ANIMAL PRODUCTION

1. (a) State the qualities of a good stock man.
- b) Explain the factors that influence water intake by animals.
2. (a) Define artificial incubation.
- b) Outline the consideration when selecting eggs for hatching on the farm.
- c) Describe the management practices carried out during artificial incubation.
3. (a) With a flow diagram, describe the life cycle of a liver fluke.
- b) Explain how animals acquire diseases on the farm.
- 4(a) Outline the effect of diseases in livestock.
- (b) Describe the signs of diseases in livestock.
- (c) How can disease outbreak in livestock be controlled.
- 5(a) State the importance of Poultry rearing.
- (b) Describe the management practices carried out in a deep litter house.
- 6(a) Explain the factors that influence feed intake by animals.
- (b) Outline the considerations that have to be made in formulation of rations for farm animals.
- 7 a) Why is artificial insemination encouraged in live stock improvement
- b) Explain why an animal may fail to conceive after an artificial insemination
- 8 a) Explain factors that affect milk yield and composition

b) Outline rules which should be taken by farmers to maintain high quality milk production in a farm.

8 a) Outline the reasons for encouraging farmers to rear exotic breeds of poultry

b) Give reasons for carrying out each of the following practices in poultry

i) Culling ii) Debeaking

9 a) Describe how good quality milk can be obtained on a dairy farm.

b) How can the quality of milk produced be lowered.

10 a) Explain the common causes of mortality in calves

b) Explain how calf mortality can be prevented

11 a) Describe the abnormalities that occur during egg formation

b) How can good quality eggs be produced in a deep litter house.

12 a) What are the effects of ticks on live stocks.

b) Describe the lifecycle of a 3-host tick

C) Suggest measures of tick control on the farm

13 a) Give the causes of milk hold up in a cow during milking

b) Explain the factors that affect the quality and quantity of milk in cattle.

14 a) Mention the bad habits that develop in birds which are confined.

b) What are the causes of vices in poultry

b) What are the causes of vices in poultry

C) How can a farmer control vices in poultry?

15 a) Why have farmers continued to keep livestock?

b) Explain the factors affecting livestock distribution in Uganda

16 a) Why should animals be given plenty of water?

b) Explain the factors affecting water intake by farm animals.

17 a) Why is pig production gaining popularity among livestock farmers

b) Describe how a pregnant sow can be managed up to farrowing.

SECTION III

MECHANIZATION AND FARM MANAGEMENT

1. (a) Explain the considerations when selecting site suitable for farm building.

- b) Outline the characteristics of a good livestock house.
- 2. (a) Discuss the activities carried out to facilitate marketing of agricultural products.
- b) Explain the factors that determine the price of a commodity.
- 3. (a) Why are diesel engines more suited for farm work?
- b) Describe the operation of a 4-stroke compression ignition engine
- 4(a) Explain factors which affect supply of agricultural products.
- (b) How can marketing of agricultural produce be improved?
- 5(a) Define wood seasoning.
- (b) Explain the procedure of seasoning timber by air.
- (c) Suggests the advantages of Using wood as a building material.
- 6(a) What is a stroke?
- (b) Explain the operation of a four stroke cycle in diesel engines.
- (c) Give six advantages of four stroke cycle engine.
- 7 a) Suggest ways through which farmers may acquire land for farming in uganda.
- b) Explain the advantages of land consolidation to the farmer
- 8 a) Outline the practices a tractor operator would carry out on a tractor before taking it to the field
- b) Explain why tractors are not popularly used in some parts of uganda.
- 9 a) Outline the marketing functions undertaken by a vegetable farmer.
- b) Explain problems farmers face in marketing vegetables.
- 10 a) State reasons why most farm tractors are diesel type
- b) Describe how you would prepare a tractor for the days work.
- 11 a) Why are buildings important on the farm
- b) Outline the factors a farmer should consider when selecting the type of wood to use on the farm
- 12 a) Explain briefly the sources of farm power used on the farm
- b) Explain the factors that have limited the wide spread use of ox- ploughs in uganda
- 13 a) Define agricultural credit
- b) What are sources of agricultural credit
- C) Explain how use of agricultural credit can be made more useful.
- 14 a) Why are farmers advised to keep good farm records.

b) Miss Jane carried out the following transactions in her farm in the year ending 31st Dec 2016.

She bought 2 goats at shs 300,000 each

50 kg of NPK fertilizer at shs 50,000

Vaccines for animals worth shs 160,000.

She paid casual labour worth shs 400,000, eggs at shs 500,000 and off layers at shs 200,000.

She received from her debtors shs 400,000.

Her opening valuation was shs 1,000,000 and closing valuation was 1,300,000.

- i) Prepare a profit and loss account for Miss Jane's farm.
- ii) Did she get a profit or a loss? Show your working.

15 a) What are the problems associated with communal land ownership?

b) How can the problems be overcome?

16 a) What are the features of a good store?

b) Explain factors to consider when setting a crop store.

17 a) Outline the importance of processing agricultural produce.

b) Explain the problems farmers face during the marketing of agricultural products.

18 a) How can farmers access agricultural credit?

b) Explain the contribution of agricultural credit to the development of agriculture in Uganda.

c) What problems are faced by credit users?