)FARM FENCES

Revision questions

- 1(a). Explain why it is necessary to construct fences on a farm?
- (b). Describe the various types of fences found on farms.
- 2(a). What tools should a farmer have in order to construct a wire fence?
- (b). Describe the procedure followed when constructing a wire fence.
- 3(a). Describe the various kinds of wooden posts found in a wire fence.
- (b). Outline the advantages and disadvantages of using wooden posts in fencing.
- 4(a). Why is it necessary to treat wooden posts before using them to construct a fence?
- (b). Describe the methods of treating wooden posts.

FARM BUILDINGS

- 1(a). What where the benefits of having buildings on a farm?
- (b). Explain the factors a farmer should consider when selecting a site for farm buildings.
- 2(a). Outline the disadvantages of cattle kraal as a shelter for livestock.
- (b). State the features of a well designed and constructed cattle barn.
- (c). What are the advantages of having a cattle barn on the farm.
- 3. Outline the features of a well designed and constructed .
- (a). Calf barn
- (b). Poultry house
- (c). Piggery house
- (d). Farm tools and equipment store
- (e). Store for farm products
- (f). Building for housing agro-processing machinery.
- 4. What factors should a farmer consider when :-

- (a). Planning and designing farm buildings.
- (b). Selecting materials for constructing farm buildings
- (c). Laying out farm buildings.
- 5(a). Outline the procedure of establishing the foundation for a building.
- (b). State the features of a well constructed
- (i) Foundation.
- (ii) Roof.
- FARM WATER SUPPLY
- **Revision questions**
- 1(a) Explain why water is of great importance on a farm.
- (b) State the problems that are likely to be caused by water on a farm.
- 2(a) Outline the sources of water used on a farm.
- (b) How can water intended for later use be stored on the farm?
- (c) Outline the maintenance requirements of water storage containers.
- 3(a) Briefly explain the various types of pumps used to pump water.
- (b) How can farm water be treated to make it safe for use.
- (c) State the maintenance requirements of water sources .

ANIMAL HANDLING LAYOUTS

- 1(a) With the help of a diagram, describe the structures of a cattle dip tank.
- (b) Explain the factors to be considered when selecting a site for constructing cattle dip tank.
- 2 .Describe the procedure followed when :
- (a) Filling up and calibrating the cattle dip tank.
- (b) Dipping the cattle .
- 3(a) What do you understand by the following terms as related to the dipping of cattle;

(i) Stripping.

(ii) Replenishing.

(b) The rate of dillution of an acaricide when filling the dip tank is 1:220 (1L of acaricide per 2200L of water) and the replenishing rate is 1:1500.

(i) If the capacity of the tank is 21120L, how much acaricide will be added to the water in the tank when filled to capacity?

(ii) After dipping some of the animals, the level of the mixture in the tank fell to 16920L. How much acaricide should be added when topping up the level?

4(a) State the precautions that must be taken when and after using a cattle dip tank.

- (b) Outline the components of;
- (i) A cattle spray race.
- (ii) A cattle crush.
- 5(a) Outline the advantages and disadvantages of using a cattle;
- (i) Spray race.
- (ii) Dip tank to control external parasites on livestock.
- (b) List the operations carried out on farm animals while restrained in the crush.

AGRICULTURAL MECHANISATION

Revision questions

- 1(a) What do you understand by the term agricultural mechanisation?
- (b) How is agricultural mechanisation beneficial to the farmer?
- (c) State the limitations of agricultural mechanisation.
- 2(a) Explain why the levels of agricultural mechanisation in the developing countries are low.

(b) What steps can be taken to promote the adoption of agricultural mechanisation in the developing countries.

FARM POWER

Revision questions

1 State the advantages and disadvantages of the following sources of farm power :-

- (i) Human power.
- (ii) Animal power.
- (iii) Wind power.
- (iv) Solar power.
- 2(a) Explain the factors that influence the power output from animals.
- (b) Give reasons why the use of animal power may not be successful in some parts of Uganda.
- 3(a) State the functions of the following parts of an internal combustion engine.
- (i) Cylinder
- (ii) Connecting rod
- (iii) Cylinder head
- (iv) Camshaft
- (v) Fly wheel
- (vi) Piston ring

(b) Explain how the burning of fuel in an internal combustion engine results in the movement of a tractor.

4. State the differences between the spark ignition and the compression ignition engines.

- 5. With the help of simple diagrams, describe how a two-stroke cycle engine works.
- 6(a) Outline the advantagess and disadvantages of :-
- (i) Two-stroke cycle engine
- (ii) Four-stroke cycle engine
- (b) In what ways does a two-stroke engine differ from a four -stroke engine.
- 7(a) Why is it necessary to have the air purified before it enters the engine?
- (b) With the help of a diagram, describe the working of the oil bath air cleaner.
- (c) What should be done to the oil bath air cleaner to ensure that it keeps working properly.
- 8(a) Outline the components of the fuel system of a petrol engine and their functions.
- (b) With the help of a simple diagram, describe how the carburetor works.

(c) Suggest the care that should be given to the fuel system of a petrol engine so that it keeps working properly.

9(a) What are the functions of lubricants in engines?

(b) Briefly describe the various types of lubrication systems found in engines.

(c) How can the lubrication system be kept working properly?

10(a) What are the likely consequences of over heating in engines?

(b) Outline the major components of the water cooling system of an engine and their functions.

11(a) State the advantages and disadvantages of using water as a coolant in engines.

(b) Suggest the measures that should be taken to keep the water cooling system working properly.

12(a) Outline the major components of the coil ignition system of a petrol engine and their functions.

(b) Describe how the coil ignition system of a petrol engine works.

13. Outline the major components of the coil ignition system of a petrol engine and their functions.

14. Describe the services that should be given to the tractor before it is taken to field for a day 's work.

FARM TOOL AND EQUIPMENTS

Revision questions

1(a) List ten (10) example of simple tools used in gardening.

(i) Farm workshop

(ii) Diary farming

- (b) Give one use of the parts you listed in (a) above .
- 2(a) Draw and lebel the structure of the mouldboard plough.
- (b) State the functions of each of the parts you labelled in (a) above.
- 3(a) Outline the advantages and disadvantages of using a mouldboard plough.

(b) What adjustments should a farmer make on the disc plough to enable it work satisfactorily under various conditions?

- 4(a) Outline the conditions that favour using the disc plough to prepare a seedbed.
- (b) What care must be given to the mouldboard plough to stay in good working conditions.

5(a) Outline the major components of the ox mouldboard plough and state the function of each component.

(b) Why is the ox mouldboard plough not widely used by Ugandan farmers?

6(a) Distinguish between a farm tool and a farm equipment.

(b) Suggest measures a farmer can take to keep the farm tools and equipment in good working conditions?

PRINCIPLES OF AGRICULTURAL ECONOMICS

- 1(a) Explain the factors that determine the efficiency of labour.
- (b) What factors do influence labour supply in agriculture?
- (c) With the help of a diagram, describe how the wage levels affect labour supply.
- 2. Distinguish between the:-
- (a) Deman schedule and the demand curve.
- (b) Consumer demand and market demand.
- 3. Discuss the factors that affect the demand of agricultural products.
- 4(a) What do you understand by the term price elasticity of demand?
- (b) With the help of illustrations, explain the various types of price elasticity of demand.
- 5. Discuss the factors that affect the supply of agricultural products.
- 6(a) Why do prices agricultural commodities.
- (b) Discuss the effects of fluctuations of prices of agricultural commodities.
- (c) How can the fluctuation of prices of agricultural commodities be avoided.
- 7(a) What do you understand by the term opportunity cost.
- (b) Explain the various types of costs incurred in agricultural production.
- 8(a) Distinguish between risks and uncertainties.
- (b) Give examples of;

- (i) Risks and (ii) Uncertainties faced by farmers.
- (c) How can the effects of risks and uncertainties be offset?
- 9(a) What is a production function.
- (b) With the help of illustrations, explain the types of production function.
- 10(a) State the various ways in which products combine.
- (b) State the low of diminishing returns.

FARM RECORD KEEPING AND FARM BUDGETING

Revision questions

- 1(a) Explain the following terms as related to marketing.
- (i) Market
- (ii) Price
- (iii) Marketing

2. Discuss the marketing functions that are involved in the marketing of agricultural commodities.

3(a) Explain why farmers should be encourage to (i) grade ,(ii) package their agricultural products before selling them.

- (b) State the services offered by
- (i) Retailers
- (ii) Whole sellers
- 4(a) What are marketing boards?
- (b) State and briefly explain the functions of marketing boards.
- (c) Give the problems that lead to the collapse of marketing boards in Uganda.
- 5. Discuss the problems faced by farmers involved in the marketing agricultural commodities.

FARMERS' ORGANISATION

- 1(a) What is a co-operative society?
- (b) Outline the steps /procedures of setting up a co-operative society.

(c) Explain the factors necessary for the success of a co-operative society.

2. Describe the organisational structure of the co-operative movement in Uganda.

3. State and briefly explain the principles that govern the activities of co-operative societies.

4.(a) Outline the types of co-operative society.

(b) What are the benefits of being a co-operative member.

5.(a) State the differences between co-operative society and non-co-operative private sector business organisation.

(b) Discuss the functions of co-operative societies.

6.(a) Give and explain the reasons that lead to the poor performance and collapse of the co-operatives in Uganda .

(b) Discuss the problems facing co-operatives currently and steps been taken to solve some of these problems.

7.(a) What do you understand by the term plan for modernization of agriculture?

(b) Outline the objectives of plan for modernization of agriculture (PMA).

8. Discuss the approach /intervations/strategies the government of uganda intends to use under the PMA to promote commercial agriculture.

9(a) What is the National Agricultural Advisory Services (NAADS) programme?

- (b) Outline the objectives of NAADS programme.
- (c) Explain how NAADS programme is being implemented.
- 10(a) State and explain the guiding principles of NAADS.
- (b) How do farmers benefit from the support of NAADS.

11(a) Briefly state and explain the types of credits available to farmers.

- (b) State the sources from where farmers can obtain agricultural credit.
- (c) What are the reasons for farmers' failure to access /obtain agricultural credit?

LAND REFORM

Revision questions

1(a) What do you understand by the term land tenure?

- (b) Describe the systems of land tenure that are common in Uganda.
- (c) Outline the advantages and disadvantages of each system of land tenure mentioned in (b) above.
- 2(a) What is land fragmentation and what causes it?
- (b) State the disadvantages of land fragmentation.
- 3(a) What do you understand by the term land reform?
- (b) Give reasons as to why it is necessary to undertake land reform programmes in Uganda?
- 4(a) Distinguish between a settlement and a resettlement?
- (b) What are the objectives of establishing settlement schemes?
- (c) Suggest the factors that favour the success of a settlement scheme.

5. Suggest ways in which settling and resettling people in a new area can promote agricultural production.

END