

PART A: (40 MARKS)

1. (a) C (c) D  
(b) D (d) B (02 marks)
  
2. (a) The following below are the advantages of raising a coffee crop from cuttings. (Any three)
  - Controls seed borne diseases
  - True characteristics of the parent are inherited leading to uniformity in the field.
  - cuttings have a high chance of survival.
  - Risks of seedling diseases are eliminated.
  - Plants from cuttings mature faster than those that start from seeds.
  - There is quick establishment of plant.
  - The delicate seedling stage is eliminated (3 marks for 3)
 (b) Below are the reasons why a coffee crop should be pruned.
 

<ul style="list-style-type: none"> <li>• To reduce overcrowding of the coffee plant.</li> <li>• to reduce competition for water and mineral salts</li> <li>• To ease harvesting of the yields.</li> </ul>	<ul style="list-style-type: none"> <li>• To reduce the spread of pests and diseases as the thick leaves harbour pests.</li> <li>• To increase on the yields</li> </ul>
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 (Any 2 correct 2 marks)
  
3. Below are the factors which influence the choice of the irrigation method to use in an area.
 

<ul style="list-style-type: none"> <li>• The nature of the land available</li> <li>• Labour available</li> <li>• Income level of the farmer</li> <li>• The type of crop to be grown</li> </ul>	<ul style="list-style-type: none"> <li>• The season of the year wet or dry season.</li> <li>• Skills required for a particular method to be used.</li> <li>• Amount of water available.</li> </ul>
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 (4 marks for any correct 4)
  
4. The following below are the functions of farmers' Organisations.
 

<ul style="list-style-type: none"> <li>• They provide inputs to the farmers at a subsidised price.</li> <li>• They provide improved storage facilities.</li> <li>• They give credit to farmers to facilitate their activities.</li> <li>• They help to bargain for better prices.</li> </ul>	<ul style="list-style-type: none"> <li>• They provide transport services to members.</li> <li>• they provide advice or education through extension workers.</li> <li>• They provide processing facilities to farmers.</li> <li>• Provide market for the farmers produce.</li> </ul>
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 (5 marks for any correct 5)
  
5. The following below are the functions of the electrical system of a tractor.
 

<ul style="list-style-type: none"> <li>• It starts the engine.</li> <li>• It is used for lighting lamps.</li> <li>• It operates the horn or hooting</li> <li>• It recharge the battery</li> <li>• It operates the wipers</li> </ul>	<ul style="list-style-type: none"> <li>• It provides the spark to ignite fuel and air mixture in petrol engine.</li> <li>• Operates the radio.</li> <li>• It operates the different gauges on the dash board.</li> </ul>
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 (4 marks for any correct 4)
  
6. (a) **A GRAPH SHOWING THE RELATIONSHIP BETWEEN THE PRICE OF BEANS AND THE QUANTITY BOUGHT**

6. (b) (i) Below are the factors that affect the price of a commodity.
- The demand of the commodity
  - Level of supply of the commodity
  - The gov't policy of taxation and subsidies.
  - Quality of the commodity
  - Cost of production.
  - Season of the year
  - Market structure
  - Price leading
- (5 marks for any 5)
- (ii) The following are the factors that affect the demand for a commodity.
- Price of the commodity
  - Income of the consumers
  - Price of other related commodities
  - Tastes and preferences
  - Level of education of the population
  - Sex
  - Size of the population
  - Age
  - Level of technology involved
  - Level of advertising.
- (5 marks for any correct 5)
7. (a) Below are the advantages of a good lubricant.
- It cools the engine to avoid overheating.
  - It reduces friction between moving parts of the engine.
  - It reduces sparks which are made when
  - It removes dirt from the engine of the tractor.
  - It absorbs shock and vibration that occur in the engine.
  - It seals the space between the piston and the cylinder walls.
  - It prevents rusting.
  - It reduces tear and wear of moving parts.
- (8 marks for any correct 8)
- (b) The following below are the causes of an engine over heating.
- Lack of water in the radiator
  - If the thermostat is not working
  - Faulty water pump.
  - Accumulation of dirt, insects in the radiator.
  - Broken or loose water pipes.
  - Low oil level in the sump.
  - Faulty radiation cup
  - Leaking radiator.
- (Any 6x2 = 12) well explained
8. (a) Agricultural credit refers to the financial assistance given to a farmer in form of loans to finance their farm production and repay with interest./It is borrowed capital either in cash or kind used by farmers to finance their activities. (02 marks)
- (b) Below are the benefits of acquiring agricultural credit to farmers.
- It is used to purchase long term assets such as land and machines.
  - It is used to provide a working capital to buy inputs.
  - It is used to overcome risks and uncertainties.
  - To provide capital for construction of farm structures.
  - It may be used to finance their activities throughout production season.
  - It is used to increase the level of production.
- (6 marks for any 6)
- (c) The following are the reasons why farmers sometimes fail to repay credits.
- High interest rates charged by lending agencies.
  - Farmers misuse credit
  - Fluctuations of prices of the produces.
  - Failure to enterprise due to natural factors and poor management.
  - Poor timing of credit.
  - Ill health of the farmer leading to poor supervision of his enterprises.
  - Political instability period.
  - Short repayment period.
  - High taxation on agricultural products.
- (Any 6x2 = 12 marks)
9. The field practices that lead to increased crop yields are as follows below:
- Timely planting
  - Application of manure and fertilizers.
  - Use of recommended spacing
  - timely preparation of seed bed
  - early weeding
  - Thinning and desuckering to reduce competition
  - Topping or pruning to remove excess branches
  - Pest and disease control
  - Planting at uniform depth
  - Irrigation during the dry season
  - Mulching to reduce water loss from soil
  - Staking to reduce lodging in crops like bananas.
  - Drainage to remove excess water.
  - Gapping to obtain optimum plant population
  - Earthing up to encourage root development
  - Timely harvesting
  - Crop rotation
- (Any 10 x2 well explained)

10.(a) Below are the problems of weeds in crop production

- Weeds compete with crops for nutrients.
- Weeds harbour pests and disease causing organisms
- They destroy the part that would be harvested.
- They interfere with root formation and development.
- Parasitic weeds lower yield of cereals.
- They make harvesting difficult.
- Increase the costs of production.

(Any 5x2 =10 well explained)

(b) Characteristics that have made weeds more successful:

- Weeds have the ability to produce many viable seeds.
- Seeds of weeds can remain dormant but viable for a long time.
- Weeds can go through a shorter life cycle and yet produce viable seeds.
- Weeds can grow in a wide range of soils.
- Weeds have a better absorption capacity for nutrients.
- The weed population can increase very fast since many of them are self-fertilized.
- Weeds are resistant to many plant pests and diseases.
- Produce poisonous substances that prevent plants from growing near them
- Some are not palatable hence they are not grazed on.
- Weeds are resistant to harsh climatic conditions.
- Regrows very fast after being grazed on.
- Weeds have protective structures thorns.
- Some are used as food and so they are preserved.
- Weeds have a high growth rate.

(Any 10x1 = 10 marks)

11.(a) Reasons why irrigation is important in crop production.

- It facilitates crop production throughout the year.
- The crops get adequate moisture.
- The water supply to crops is regulated accordingly.
- More land can be put under production.
- It makes it possible to grow specific crops.
- It modifies the soil's physical conditions.
- It modifies the soil's chemical environment by removing excess salts in the soil.
- Softens the soil.
- Controls some pests and diseases.

(Any 5x1 = 05marks)

(b) Below are the advantages of overhead irrigation.

- No leveling of land is required.
- Fertilisers can be mixed in water and applied.
- It is an ideal method of irrigation to use in sandy soil.
- The amount of water applied can be controlled.
- There is adequate infiltration of water into the soil.
- Soil erosion is reduced.
- It leaves more land available for cropping.
- Can be applied in all topographical conditions.
- Pesticides can be mixed in the water and applied at once. (Any 8x1 = 08 marks)
- The following are the disadvantages of overhead irrigation.
- Top soil may harden due to impact of water droplets.
- High labour cost can be incurred in running and joining laterals.
- Salts can accumulate in the root zones.
- It is tiresome to shift pipes/laterals.
- Can cause damage of seedlings and flowers.
- Requires skilled labour to erect.
- High costs of maintenance.
- Wind can cause drift of the water.

(Any 7x1 = 07 marks)

12.(a) The following below are the factors a farmer must consider before establishing a beef herd:

- Land
- Pasture or feeds

- Capital
- Breed of animal
- Market availability
- Size of herd
- Prevalence of tsetseflies
- Labour available
- Security
- Records of individual animals to be purchased
- source of stock
- Age of animals
- Adaptability to the environment

(b) Below are the factors that limit beef production in Uganda:

- Poor quality pasture
- Poor climate
- Insecurity
- Shortage of land
- Low level of education of farmers
- Inadequate extension services.
- Inadequate capital.
- Parasites and diseases.
- Poor storage and marketing facilities.
- Poor breeds. (Any 5x1 = 05marks)

13.(a) The advantages of rearing pigs as compared to other livestock are as follows.

- Pigs require little land to be reared compared to other livestock.
- Pigs require low initial capital when starting compared to other livestock.
- Pigs do not require specific feeds compared to other livestock.
- Maintenance cost of pigs is lower than other livestock.
- Pigs have a high killing out percentage compared other animals.
- They give birth to many young ones quickly compared to other animals.
- Pork is very tender and delicious compared to others.
- Pigs have a high feed conversion rate
- Pigs produce highly nutritious manure.
- Pigs are cheap to buy.

(Any 10 x 1 = 10marks)

(b) Below are the problems associated with rearing of pigs.

- Negative attitude by some religions towards pig production (Moslems)
- Pig excreta causes air pollution and diseases to man.
- Poor marketability.
- Pigs require alot of food to sustain them.
- Pigs bring negative social aspect with the neighbours if they are moslems.
- Poorly cooked pork spreads tape worm to man.
- Pigs eat their litter and humans if hungry.
- Pigs are highly affected by heat.

(Any 5x2 = 10marks)

14.(a) Oestrus cycle is a cycle in female animals that involves, secretion of hormones, formation of graafian follides, release of the ova and the heat period. OR It is a cycle from one heat period to another in female animals.

(Any 1x2 = 02 marks)

(b) Signs of heat.

- The goat becomes restless.
- It makes alot of noise.
- Frequent urination
- Rise in body temperature
- Slight drop in milk yield.
- Seeks company of the billy goat.
- Loss of appetite
- It mounts other goats.
- Allows other goats to mount her.
- Drop in milk yield.

(Any 6x1 = 06marks)

(c) How to manage a goat during its pregnancy.

- Spary to control external parasites
- Deworming to control internal parasites
- Provision of adquate clean water
- Provision of adquate food stuffs.
- Drying off.
- Steaming up
- Provison of soft beddings
- Veterinary attention/regular diagnosis
- Separation from other goats.

(Any 6x2 = 12marks)

END