# 

**‘A’ LEVEL GUIDE**

**AGRICULTURE**

**Paper 1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *1* | *D* | *11* | *C* | *21* | *C* |
| *2* | *B* | *12* | *D* | *22* | *A* |
| *3* | *D* | *13* | *C* | *23* | *A* |
| *4* | *A* | *14* | *A* | *24* | *D* |
| *5* | *A* | *15* | *B* | *25* | *C* |
| *6* | *B* | *16* | *A* | *26* | *A* |
| *7* | *C* | *17* | *A* | *27* | *A* |
| *8* | *D* | *18* | *D* | *28* | *B* |
| *9* | *D* | *19* | *C* | *29* | *B* |
| *10* | *C* | *20* | *A* | *30* | *A* |

***SECTION B (70 MARKS)***

1. *(a) State the problems that farmers face in the process of marketing their*

*products. (05 marks)*

* *Lack of good storage facilities*
* *Poor transport network*
* *Lack of enough market information*
* *Fluctuating prices of produce*
* *Untrustworthy middlemen*
* *Unorganized scattered producers*
* *Limited processing plants / high costs of processing products*
* *Competition from highly developed foreign farmers*
* *Trade restrictions amongst east African countries*
* *Competition from synthetic products which are cheap*
* *Language barrier*
* *Government should operate stabilisation fund*
* *Fixing quotations / for each farmer to control over production*

*Any 5 points 1 mark each 5 x 1 = 5 marks*

*(b) How should government enhance effective marketing of agriculture products.*

*(05 marks)*

* *Government should construct agro – processing factories to add value to products*
* *Government should improve road network for easy transportation of agricultural produce*
* *Government should sign trade agreement with a number of countries to enable farmers sell their produce*
* *Government should provide accurate market information to farmers on time.*
* *Government should fix prices for agriculture products for easy pricing.*
* *Stores should be constructed in various regions of Uganda to store farmers produce*
* *Taxes on transportation trucks should be reduced to encourage easy transport*
* *Zoning of production should be done by government to control over production*
* *Government should educate farmers on marketing through agriculture extension.*

*Any 5 points 1 mark @ well explained.*

1. *(a) Explain the rules of good calf housing. (04 marks)*

* *Provide enough space in the calf pen to control easy disease spread*
* *Provide a leak proof house to redcue infections in calves*
* *Provide clean letter in calf pen to provide warmth absorb moisture from urine and dung*
* *Provide good ventilation in the house to control respiratory infection*
* *Lay concrete floor that is easy to clean*
* *Provide feeders and drinkers to ease feeding of calves*
* *Ensure that the house is well lit during day allow good activity and observation / windows of calves*
* *Ensure that the calf pen is divided into individuat compartinets to reduce spread of diseases and vices*
* *Construct strong walls to reduce accidents to calves.*

*Any 4 points 1 mark@ well explained 4 x 1 = 4marks*

*(b) What makes colostrums a good food for calves? (03 marks)*

* *It contains a lot of nutrients needed by calves*
* *It removes sticky materials from the digestive system of the calve*
* *It contains anti bodies that help the calf to fight disease*
* *It si highly digestible.*

*Any 3 points 1 mark @ 3 x 1 = 3 marks*

*(c) Give three causes of low calf growth rates. (03 marks)*

* *Breed with low growth rate*
* *Giving less feeds to calves*
* *Giving less nutritious feeds to calves / balanced diet*
* *Parasitic attack to calves*
* *Disease attack to calves*

*Any 3 points 1 mark @ 3 x 1 = 3 marks*

1. *(a) What is the significance of soil pH in crop production? (04 marks)*

* *It determines or influence the type of crop to be grown*
* *It will influence the availability of soil living organism*
* *Influences the availability of plant nutrients*
* *It can influence the occurrencefungal diseases*
* *It can determine the rate of nitrogen fixation in soils*
* *It may influence the type of fertilizers to use*
* *It can influence the amount of lime to apply on soil*

*Any 4 points 1 mark @ 4 x 1 = 4 marks*

*(b) Explain the factors considered before carrying out soil amendment using lime. (06 marks)*

* *Soil pH very low pH requires use of a lot of lime*
* *Soil buffer capacity – soil with high buffer capacity may require more line to be used.*
* *Amount of bases in exchange complex – the more the bases, the less lime needed.*
* *Type of crop to be grown – different crops require different pH levels*
* *Fineness of lime – fine lime acts quickly on pH changes*
* *Amount manganese present in soil – manganese increases acidity hence the more , manganese, the higher the acidity hence more lime.*

*Any 4 points 1 ½ @ well explained*

*½ mention 1 explanation*

1. *(a) Why should a farmer carry out proper maintenance of farm tools and*

*equipment? (05 marks)*

* *To reduce injry to a person using it when its faulty / damaged*
* *To increase the durability of the tools and equipment through proper maintenance*
* *To increase the efficiency of tools and equipment once they in good conditions*
* *To reduce the costs of maintenance due to damage*
* *To increase the resale value once maintained property*
* *To ensure that the tools and equipment work properly and produce high quality work*
* *To avoid loss of some parts of equipment*

*Any 5 points 1 mark @ well explained 5 x 1 = 5 marks*

*(b) Give the precautions taken while using farm tools and equipment. (05 marks)*

* *Handle tools carefully and correctly to reduce injury*
* *Uses the tool and equipment for designed purpose to reduce damage*
* *Maintain the tools and equipment in a good working condition for effectiveness*
* *Have the right skills before handling any tool or equipment to reduce injury*
* *Put on protective clothes before handling tools and equipment*
* *The tools and equipment should be firmly secured*
* *Ensure that bolts and nuts are tightened*
* *Ensure that moving equipment should operated at recommended speech to avoid accidents.*
* *Store the tools and equipment property to reduce damage*
* *Do not work with tools and equipment on slippery grounds to reduce injury*

*Any 5 points 1 mark @ 5 x 1 = 5 marks*

1. *(a) Explain the factors affecting rooting in stem cuttings. (05 marks)*

* *Treatment of setts with IAA, IBA, or NAA encourages rooting*
* *Chatting of the materials increases rooting*
* *Adequate soil moisture stimulates rooting*
* *Age of cutting with very young and old having low or rooting*
* *Warm soil temperatures will encourage rooting in cuttings*
* *Presence of active buds on the cutting enhances rooting*
* *Good soil drainage encourage faster rooting in cuttings*
* *Adequate soil air for root respiration*
* *Good soil structure facilitates easy rooting*

*Any 5 points 1 mark @ well explained 5 x 1 = 5 marks*

*(b) State the advantages of growing grafted oranges. (05 marks)*

* *Grafted oranges mature early / fast*
* *Grafted oranges are easy to harvest due to their being short*
* *Grafted orange are easy to spray since they are short*
* *Oranges produced are seedless hence easy to consume.*
* *They can survive in harsh soil conditions when the root stock is lemon*
* *The yield of grafted is higher than that ungrafted oranges*

*Any 5 points 1 mark @ 5 x 1 = 5 marks*

1. *(a) Describe the characteristics of a good cattle dip. (05 marks)*

* *It has a concrete collecting yard where animals assemble*
* *It has a dip tank that holds the dip wash*
* *It has foot baths where animals wash their feet*
* *It has a dip wash / acarcide that kills ticks*
* *It has a drainage race where excess dip wash is collected*
* *It has a leak proof roof that protects the dip wash from dilution*
* *It has guard rails that keep them from straying*
* *Has splash walls to prevent acaricide from splashing out*
* *Entrance race to allow one at a time*
* *Jump off slanting in wards*
* *Has return pipe to return excess acaricide*
* *Exit ramp to also animals to move out easily*
* *Soak away pit where used acaricide is pumped to.*

*Any 5 points 1 mark @ 5 x 1 = 5 marks*

*(b) State what a farmer may consider while selecting materials for constructing farm structures. (05 marks)*

* *Cost of the materials*
* *Availability of materials*
* *Durability of materials*
* *Skills needed in using materials*
* *Type of farm structure to be built*
* *Design of farm structure*

1. *(a) Explain the meaning of the following as used in apiculture. (04 marks)*
2. *Dearth period.*

* *Is a period when there is no source of nectar for bees*

1. *Supercedure*

* *It is situation when the old queen is killed to give room for a new one to arise.*

1. *Absconding*

* *It is a situation when the whole colony leaves a hive*

1. *Swarming*

* *It is a situation when part of a colony leaves a hive while leaving the other part*

*(b) Suggest the measures taken to increase honey yields in a hive. (06 marks)*

* *Providing water to bees*
* *Providing flowers / nector sources to bes*
* *Uniting colonies to increase nectora collection*
* *Controlling bee predators in an apiary*
* *Providing enough hives in an apiary*
* *Harvesting honey use appropriate methods*
* *Replacing the old queen to strengthen the colonices*

*Any 6 points 1 mark @ 6 x 1 = 6 marks*

***END***