

Students Name:

School Name:..... Index Number

527/1
AGRICULTURE
Paper 1
(Theory)
JULY/AUG 2025
2 ½ hours



HES MOCK EXAMINATIONS 2025

UGANDA CERTIFICATE OF EDUCATION

AGRICULTURE.
PAPER 1
(THEORY)
2 HOURS 30 MINUTES

INSTRUCTIONS

- This paper consists of **6 items** examination items. It has **two** sections; **A** and **B**.
- Section **A** has **two** compulsory items.
- Section **B** has **two** parts; **I** and **II**. Answer **one** item from each part.
- Answer **four** examination items in all.
- Any additional item(s) answered will **not** be scored.
- Indicate items attempted in **Section B (Part I & Part II)** in the box below
- **All** answers **must** be written in Answer sheets provided.

SECTION A
SOIL SCIENCE AND VALUE ADDITION

*Answer **both** items from this section.*

ITEM 1.

Malongo village is occupied by dairy farmers. These farmers obtain little profits from their projects since they are underpriced by milk brokers on individual level. One day, Musa decided to add value to his milk by making yogurt. He packed his yogurt in white polythene bags for distribution to the nearby community members who had low economic potential. The village is next to a highly populated Masaka city. He visited a bank to open up a bank account with only his LC1 letter to confirm his residence. Some farmers who consumed yogurt complained about its quality.

TASK

- a) Design the steps Musa should follow when making yogurt that meets his customers' demands.
- b) How would you advise Musa and community members to achieve the best from their project?

ITEM 2.

Musa purchased an acre of steep land for growing of potatoes which perform well in soils with pH of 4.8-5.5. The land is entirely occupied with Bindweed which is an alkaline tolerant weed. Part of the land is covered with channels running down the slope. The same piece of land is being claimed by a neighbor whose crops on one side of the land exhibit dead growing points and scotched leaves regardless of good management. Some part of his land possess a hard and crusty surface while the lower part of his land is entirely occupied with water loving plants. He failed to meet his target.

TASK.

Advise Musa on how to manage his land and to solve the challenges he faced so that he can improve on potatoes production.

SECTION B
PART I: ANIMAL PRODUCTION

Answer only one item from this part.

ITEM 3.

Busulwa obtained 20 local animals to start up his beef animal rearing project. He located his farm on 10 acres of entirely open land. On his farm, he constructed a calf pen entirely made out of a brick wall and a marram floor.

He was advised by a DAO to improve his animals using better semen from NAGRIC however, he was challenged on how to do it. He feeds animals on elephant grass throughout the day. Calves on the farm are weaned at the age of two years. In the nearby sub-county, there is outbreak of a strange disease that kills animals instantly which has troubled him.

He selects ill animals for slaughtering and feeds them heavily until the time of slaughtering. Busulwa failed to meet his goals.

TASK.

Advise the farmer on how to improve beef production on her piece of land.

ITEM 4.

Martin established a fish farming project. He selected a bushy site far away from his home for pond construction. He constructed a pond on sandy soils to provide room for his fish. He introduced fingerlings into the pond a day after application of manure to encourage growth of planktons for fish feeding.

After some time, some plants were observed growing in pond water which he claimed to act as fish feeds. This forced him to feed his fish once a day. Upon close monitoring, some fish were observed with swollen gills, rotten fins and reduced feeding while others were seen eaten by unknown organisms on pond sides.

The little fish that were present in the pond were harvested using basin. The harvested fish was packed in tight black polythene and taken home for further consumption.

TASK.

Guide Martin on how to manage fish better for increased production.

PART II: CROP PRODUCTION

Answer only one item from this part.

ITEM 5.

Musa started a coffee growing project. He obtained seedlings that were growing in a neighbor's coffee garden. He prepared land by slashing and dug planting holes 30cm deep. He placed seedlings in the planting hole and covered them with sub soil.

After some time, the few crops which had established possessed numerous branches. Part of his garden was occupied with couch grass which was eliminated by slashing. Coffee plants at extreme end of the garden possessed berries and branches with holes while leaves were observed with orange like substances and dark spots.

Coffee was harvested by stripping all berries with mixed colours onto the ground.

TASK.

Guide Musa on how to improve his coffee production from his garden.

ITEM 6.

Opodong established a carrot growing project in Karamoja district. He bought seeds of Nantes variety which perform well under cool temperatures of 5°C-10°C. He cleared the piece of land and ploughed it once followed by creating a flat bed. He planted seeds in rows. Rows were spaced at a spacing of 5cm.

Some rows were observed with many carrot plants growing closely. Some part of the garden is occupied by other un known plants that grow vigorously. Carrot plants were observed with holes on their leaves. After four weeks, the plants that were surviving possessed powdery substances and yellow patches on their leaves.

Harvesting was done by extraction of carrot tubers with entirely green leaves in an extremely dry ground. Opodong obtained less profits compare to his expectations.

TASK.

Write the information you would give Opodong to sensitise him on how to solve his challenges to improve on carrot growing.

END