

THE NORTHERN EDUCATION DIVISION
MALAWI SCHOOL CERTIFICATE OF EDUCATION MOCK
EXAMINATION

2026 AGRICULTURE

PAPER II

(40 MARKS)

1. A teacher brought the following materials to form four class: Distilled water, beaker, dry soil sample, and salinity meter. Describe a **procedure** that should be followed to determine the salinity of the soil sample.
 - **Put the dry soil sample in a test tube.(1)**
 - **Add distilled water to the test tube. .(1)**
 - **Cover the mouth with cork stopper.(1)**
 - **Shake the test tube vigorously for three minutes to make sure the salts dissolve. .(1)**
 - **Let the soil solution settle for at least one minute (1)**
 - **Clean the salinity meter electrodes. (1)**
 - **Place the salinity meter electrodes in the solution. (1)**
 - **Record the meter readings. (1)**
 - **Convert the salinity meter reading to soil salinity by multiplying the value with the conversion factor. (2)**

(10marks)

2. Calculate the elasticity of supply of maize when price changes from K40 to K50 per kg resulting in the change in quantity supplied from 80 kg to 160 kg.

$$\begin{aligned} \text{Elasticity of supply} &= \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}} \\ \% \text{ change in quantity supplied} &= \frac{160 \text{ kg} - 80 \text{ kg}}{80 \text{ kg}} \times 100 \quad (1) \\ &= \frac{80 \text{ kg} \times 100}{80 \text{ kg}} \end{aligned}$$



$$\begin{aligned}
 &= \frac{8,000 \text{ kg}}{80 \text{ kg}} \\
 &= 100 \quad (1) \\
 \text{\% change in price} &= \frac{k 40 - k 50 \times 100}{k 40} \quad (1) \\
 &= \frac{k 10 \times 100}{k 40} \\
 &= \frac{k 1000}{k 40} \quad (1) \\
 &= 25 \\
 \text{Elasticity of supply} &= \frac{100}{25} \\
 &= 4.0 \quad (1)
 \end{aligned}$$

b. Identify the degree of elasticity in 2a

Elastic (1 mark)

c. Explain any **two** implications of price elasticity of supply and demand on agricultural commodities.

Assist farmers to make right decision¹ /whether to raise or reduce the price of agricultural commodities¹.

If producers are expecting an increase in price due to poor harvests, they withdraw their products¹ /and sell later on to make a lot of revenue¹.

Government can impose high taxes on goods with inelastic demand¹/because people have no choice but to buy though the price is high¹.

A reduction in price will increase demand¹ /leading to increase in supply for unitary commodities¹

(4 marks for any two)

3. You are provided with the specimens; **K,L**, and **M**. Use them to answer the questions that follow.

Procedure:

- Add a half teaspoonful of specimen **M** on **L** and mix them
- Observe the mixture

a. (i) State the physical property of soil that is being improved in the activity.



=Soil structure

(1mark)

(ii). Explain any **one** effect of the physical property stated in **3a. (i)** on crop production.

- **It influences water holding capacity of soil**
- **Influences aeration of the soil**
- **It affects the workability of soil, i.e., ability to be cultivated**
- **Improves cohesion through binding soil particles**
- **Reduces temperature fluctuations**
- **Improves nutrients**
- **Neutralises soils introduces micro organisms**
- **Improves nutrient composition of the soil**
- **Increasing soil pH/lowers soil acidity**

(2 marks for any two)

(b.i. Apart from the activity above explain one way through which the productivity of sample L can be improved

- **Applying lime**
- **Planting vegetative cover**

ii. Cassava

(1 mark)

c.i. Give two ways in which specimen K limits agricultural production

- **Leads to poor aeration**
- **Leads to water logging**
- **Nutrients adsorption**
- **Poor root penetration**
- **Difficult to cultivate**
- **Sticks to implements when cultivated wet**

cii. Give any two textural difference between specimen K and L.



- specimen K is smooth while specimen L is coarse/gritty
- specimen K can be rolled into a ball when wet while specimen L breaks
- specimen K is stick when wet while specimen L is not
- specimen K has fine(small) particles while specimen L has big particles

4.a.i. Give any **one** way in which specimen N is suitable for lambs under 6 months old.

- Specimen N is highly nutritious¹/ hence suitable for young lambs growth¹.
- Specimen N is easily digestible¹ /hence suitable for young lambs whose digestive system is not fully developed¹.

(2 marks for any one)

ii. Mention any one problem associated with marketing of specimen N.

Highly perishable

(1 mark)

ii. Give any one way in which the problem in 4a.ii. can be corrected.

- Processing into other products
- Freezing for later use
- Producing near to the market for easy selling

1 mark for any one)

b. Describe three steps of making hay using specimen M.

- Cutting- Forage is cut just before flowering to obtain the most nutritious and palatable.
- Drying-The cut grass should be partially sundried to preserve some moisture content.
- Stacking-The cut, partially sundried grass is baled (compressed) in a shed with a leak-proof roof.



(2 marks for each step and explanation)

THE END OF MARKING KEY

