**FORM 2 END TERM 1 2022 MARKING SCHEME**

**1. Name three methods of farming. ( 1 ½ marks)**

Agroforestry

Organic

Ranching

**Shifting cultivation**

**2. a) Name 2 practices carried out during hardening of seedlings in the production of tomatoes .( 2 mks)**

Reducing rate of watering

Reducing shade

**b) Discuss 6 management practices carried out in the tree nursery seedlings . ( 6 mks)**

regular watering ; morning and evening

uprooting weeds using hands

hardening off one week before planning

spraying of herbicides to control fungal diseases

shading to control evapotranspiration

pricking out to minimize competition of resources e.g nutrients and sunlight

**3 a) Name possible vegetative materials that can be used in propagation of the following crops ( 6 mks)**

**i. suckers – bananas and pineapples**

**ii. splits - pyrethrum and Napier grass**

**iii. crown – pineapple**

**iv. bulb- common onions**

**v. stem tuber – irish potato**

**vi. bulbil - sisal**

**b) Give reasons as to why selection of planting materials is necessary. ( 3 mks)**

**to obtain high yield**

**achieve better adaptability**

**obtain disease**

**4. a) Name 6 precautions to be observed when carrying out soil sampling . ( 6 mks)**

**Avoid contamination with cigar rete**

**Ensure sampling equipment are clean**

**Avoid mixing top soil with subsoil**

**Collect soil at appropriate depth**

**Avoid areas that would lead to misleading results**

**b) Explain importances of carrying out soil testing in crop production . ( 5 marks)**

**help to determine type of crop to grow**

**provide information on type of fertilizer to apply**

**help to determine amount of fertilizer to apply**

**provide better understanding on the cause of low yield**

**enables to know type of soil in the farm**

**c) Name 3 methods used to test the pH of the soil . ( 3 mks)**

**use of colour indicator dyes**

**use of pH meter**

**Use of litmus paper**

**d) Indicate three liming elements . ( 3 mks)**

**calcium , magnesium , sulphur**

**5. Name 2 types of labour records .( 1 mk)**

**Labour utilization analysis**

**Master roll**

**6. State 3 major characteristics of indigenous cattle breeds. ( 3 mks)**

**Fairly tolerant to high temperature**

**Highly tolerant to tropical diseases**

**Slow growth rate leading to low maturity rate**

**Have hump that stores fat that metabolizes to produce water and energy**

**7. Illustrated below is a method of turning compost . study method and answer the questions below.**

**a) Identify the method. ( ½ mark)**

**four heap method**

**b) After how long is the compost ready for use . ( 1 mk)**

**3 months**

**8. a) What is irrigation . ( 1 mk)**

**Artificial application of water into the soil for purpose of supplying sufficient moisture to crops**

**b) Name 2 roles played by irrigation . ( 2 mks)**

**supply water to crops during dry season**

**supply water to crops in dry areas**

**grow of paddy rice**

**9. Give 4 reasons as to why preparation of land is carried out . ( 2 mks)**

**Improve soil aeration**

**Improve water infiltration**

**Help incorporate organic matter into the soil**

**Expose soil pests and diseases causing micro organisms**

**10. The diagram below shows an equipment used in carrying out operation in the farm.**

**a) Identify the equipment . ( 1 mk)**

**knapsack sprayer**

**b) Name the labeled parts A and G ( 1 mk)**

**A- Handle**

**G – nozzle**

**c) State 2 maintenance practices of the equipment. ( 2 mks)**

**oil moving parts**

**clean after use**

**repair broken parts**

**11. a) Explain the following terms ( 3 mks)**

**i. hygroscopic - water forms a thin film around the soil particles and not readily available for plant use**

**ii. superfluous water – water contained in macro-pores**

**iii. capillary water – water contained in micro-pores and readily available for plant use**

**b) State 3 importances of soil in crop growth. (3 mks)**

**anchorage**

**habitat for microorganisms**

**provide water and nutrients to crops**

**site for foundation in construction of farm structure**

**12. a) Study the diagram below and answer the questions that follow .**

**i. Name the above method of propagation. ( 1 mk)**

**side grafting**

**ii. Label parts A, B and C . ( 3 mks)**

**A – Scion**

**B – budding union**

**C – root stock**

**iii. State importances of the above practice .( 4 mks)**

**shorten maturity age**

**help to repair damaged tree**

**possible to grow more than one type of fruit of the same plant**

**facilitate change**

**b) Differentiate between the following terms as used in agriculture .**

**i. grafting and budding ( 2 mks)**

**grafting is the practice of joining two separate woodystem.**

**Budding – practice of uniting a vegetative bud without woody stem part to a rootstock**

**ii. nursery bed and seedling bed ( 2 mks )**

**nursery bed – small plot where young seedlings are raised before are transplanted.**

**Seedbed – special form of nursery bed where seedlings removed from original nursery bed as a result of overcrowding are taken .**

**c) Write the importances of raising seedlings in a nursery bed. ( 2 mks)**

**raise seedlings whose seeds are tiny**

**crop takes short period in the field**

**extra seedlings could earn income by selling**

**facilitates easy undertaking of management practices**