

ANESTAR SCHOOLS JOINT EXAMINATIONS
AGRICULTURE (MARKING SCHEME) END YEAR EXAM – 2019 FORM ONE

1. Give four factors entailed in agriculture as a art. (2mks)
 - ***Tilling of the land***
 - ***Construction of farm structures***
 - ***Measuring distance***
 - ***Machine operations***
 - ***Harvesting of crops***
 - ***Feeding and handling animals***
 - ***Marketing of agricultural produce***
2. Differentiate between olericulture and pomoculture. (2mks)
 - ***Olericulture – growing of vegetables***
 - ***Pomology – growing of fruits***
3. Name four methods of farming. (2mks)
 - ***Mixed farming***
 - ***Nomadic pastoralism***
 - ***Shifting cultivation***
 - ***Organic farming***
 - ***Agro-forestry***
4. State four ways by which agriculture contributes to national development.(4mks)
 - ***Provision of raw materials to industries***
 - ***Sources of capital for further expansion***
 - ***Provision of market for industrial goods***
 - ***Provision of employment directly or indirectly***
 - ***Earns the country foreign exchange***
 - ***Provision of taxes to the government to finance national development programmes e.g. schools***
5. State four factors that lead to low crop production. (2mks)
 - ***Low level of education***
 - ***Poor health***
 - ***Poor economy***
 - ***Lack of market force***
 - ***Poor government policy***
 - ***Cultural and religious belief***
6. Name four biotic factors influencing agricultural production negatively. (2mks)
 - ***Pests***
 - ***Parasites***
 - ***Pathogens***
 - ***Predators***
7. State four effects of high temperature on crop production. (4mks)
 - ***Increases evaporation leading to wilting of crops***
 - ***Increases rate of growth/hasten maturity of crops***
 - ***Improves quality of crops such as pineapples***
 - ***Increases incidence of disease infection and pest infestation in crops.***
8. Name three forms in which soil water exists. (1 ½ mks)
 - ***Superfluous water***
 - ***Capillary water***
 - ***Hygroscopic water***

9. List four physical weathering agents in the soil formation process. (2mks)
- **Water**
 - **Moving ice**
 - **Wind temperature**
10. The diagram below represents farm tools and equipments. Study them and answer the questions that follow. (1 ½ mks)
- a. Identify the tool / equipment J, K and M.
- J - Watering can**
K – Milking churn or can
M - Mason’s trowel
- b. State one use for each of the tool/equipment labeled K and L. (2mks)
- K – used for holding milk in transit / storage**
L – Used for driving and removing nails
- c. Give two maintenance practices for the equipment labeled K. (2mks)
- **Cleaning after use**
 - **Sterilization after use**
11. State four maintenance practices of a jack plane. (2mks)
- **Cleaning after use**
 - **Tightening screws and nuts**
 - **Oiling/lubricating**
 - **Sharpening the blade**
 - **Replacing the broken handles**
12. Name four complementary tools and equipments. (2mks)
- **Hypodermic needle and syringe**
 - **Trocar and canula**
 - **Elastrator and rubber ring**
13. State the correct use of each of the following tools. (2mks)
- a. Tin snip – **cutting thin metal sheets**
b. Cold chisel – **cutting thick metal sheets**
14. State four reasons for proper care and maintenance of farm tools and equipments. (2mks)
- **To increase durability**
 - **To reduce the replacement cost**
 - **Increased efficiency**
 - **To avoid injury to the user**
 - **To avoid damage to the tool**
15. State four factors that influence the number of secondary cultivation done. (2mks)
- **Size of planting materials**
 - **Slope of the land**
 - **The moisture content of the soil**
 - **Condition of the soil after primary cultivation**
 - **For easy harvesting of root crops**
16. State four reasons for ridging. (2mks)
- **Encourage tuber expansion**
 - **Control soil erosion**
 - **Improve drainage**
 - **For easy harvesting of root crops**
17. State four practices that encourage minimum tillage. (2mks)

- **Use of herbicides**
 - **Mulching**
 - **Cover cropping**
 - **Slashing/uprooting /grazing animals on weeds**
 - **Timing cultivation**
 - **Restricting cultivation to the area where seeds are to be planted.**
18. Below is a diagram showing a method of drainage. Use it to answer questions that follow. (½ mks)
- a. Identify the method. (½ mks)
- **French drain**
- b. Other than the above method name three other methods used in drainage. (1 ½ mks)
- **Open ditches/canals**
 - **Underground drain pipes**
 - **Cambered beds**
 - **Pumping**
 - **Planting appropriate trees e.g. eucalyptus**
 - **Breaking hard pan**
- c. Outline four reasons for draining farm land. (2mks)
- **To improve soil aeration**
 - **To improve soil microbial activity**
 - **To improve soil structure**
 - **To eliminate accumulation of toxic substances/ to remove toxic substances.**
 - **To reduce soil erosion**
 - **To increase soil volume**
 - **To raise soil temperature**
19. Name three non-chemical methods of water treatment. (1 ½ mks)
- **Filtration**
 - **Boiling**
 - **Sedimentation**
 - **Decantation**
20. State four advantages of trickle irrigation. (2mks)
- **Require little amount of water**
 - **Use water under low pressure**
 - **Discourage fungal diseases**
 - **Control weeds between rows**
 - **Can be used to apply soluble fertilizers**
21. State three types of pipes used in conveying water on the farm. (1 ½ mks)
- **Galvanized iron pipes**
 - **Aluminium pipes**
 - **Rubber hose pipes**
 - **Plastic hose pipes / PVC**
22. Give four factors considered when selecting site for compost manure preparation. (2mks)
- **Well drained place**
 - **Direction of prevailing wind**
 - **Size of the farm**
 - **Accessibility**
23. Give four indicators of well-decomposed manure. (2mks)
- **Absence of bad odour**

- **Light in weight**
 - **Brown colour**
 - **Moist but not wet**
 - **Original nature of material not noticeable.**
24. Name two methods that are used in preparing compost manure. (1mk)
- **Indore or pit method**
 - **Four- heap system or stack method**
- b. Give four reasons for limited use of organic manures to small scale crop production. (2mks)
- **Bulkiness**
 - **Laborious in application and transport**
 - **They spread diseases, pest and weeds**
 - **Loss of nutrients**
 - **Burn / scorch crops if used when not fully decomposed**
25. State four importance of livestock. (2mks)
- **Source of food**
 - **Source of income**
 - **Cultural uses**
 - **Animal power**
 - **Provision of raw materials for industries**
26. Name a sheep breed which is resistant to foot rot disease. (½ mk)
- **Romney march**
- b. Mention any two examples of meat goats in Kenya. (1mk)
- **Galla**
 - **Boer**
- c. Give the terms used to describe the following livestock of different age, sex, etc
- i. Mature male pig – **boar**
 - ii. Sterilized birds - **Capons**
 - iii. Mature female goat – **nanny/doe**
 - iv. Young one of a sheep - **Lamb**
27. Name three dual purpose breeds of cattle. (1½ mks)
- **Sahiwal**
 - **Red poll**
 - **Simmental**
- b. Name the two species of camel. (1mk)
- **Dromedary camel**
 - **Bactrian camel**
28. State five uses of farm records. (5mks)
- **Help to compare the performance of different enterprises within a farm or other farms.**
 - **They show the history of the farm**
 - **Guide a farmer in planning and budgeting of farm operation**
 - **Help to detect losses or theft on the farm**
 - **Help in assessment of income tax to avoid over or under taxation**
 - **Help to determine value of farm or to determine the assets and liabilities' of the farm.**
 - **Make it easy to share profits and losses in partnerships.**
 - **Help in settling disputes among heirs**
 - **Help to show whether the farm business is making profits or losses**
 - **Help in supporting insurance claims on death theft and fire of farm assets.**

- ***Provide labour information like terminal benefits e.g. NSSF***