MWACKAN EXAM SECOND TERM 2017

AGRICULTURE FORM ONE.

MARKING

SECTION A-30MKS

 B-30MKS

 C-40MKS

 TOTAL= 100MKS

MWAKICAN FORM 1 2017

Marking schemeS

**Section A 30 mrks**

1. **Four factors that makes agriculture to be termed as an art.4mks**

-tilling of land

-measuring of farm structures

-measuring of distances

-machine operations

-harvesting of crops

-feeding and handling of livestock

-marketing of farm produce

 **2. Define the following terms as used in agriculture.5mks**

 (a)Crop pathology

 -study of crop diseases

 (b)Entomology

 -study of insect and their control

 (c) Pomology

 -growing of fruits such as oranges

 (d)Organic farming

 -growing of crops and rearing of livestock

 without using agrichemicals

 (e)Agroforestry-Growing of crops, growing of trees and rearing of livestock in the same piece of land and at the same time.

**3. State three benefit of high level of education and technology in agriculture.3mks**

-proper method and time of doing things such as planting at correct spacing

-use of right type and amount of input

-applying the input at the right place

-making right decision based on proper observation

**4. Give four effect of high temperature on crops. 2mks**

-increase evaporation leading to wilting of crops

-increase rate of growth or hasten the maturity of some crops

-improves quality of some crops such as pneaples

-increase incidences of diseases and pest infestation in crops

**5. Give four constituents of soil.2mks**

-mineral matter

-air

-water

-living organisms

-organic matter

**6. State three forms in which soil water exist.1½mks**

-superfluous water

-capillary water

-hygroscopic water

**7. State the functions of the following farm tools and equipments.**

(a)Garden trowels. 1mks

-lifting seedlings from the nursery

(b)Dibber. 1mks

-making holes for transplanting

(c)Pruning shears.1mks

-trimming hedges and shrubs

(d)Strip cup.1mks

-testing for mastitis in cows

(e)Wool shears.1mks

-cutting wool from a sheep

(f)Bolus gun.1mks

-shooting solid medicine through the mouth of an animal

(g)Trocar and canula.1mks

-reliving animal from bloat

(h)Stock and die.1mks

-for cutting threads on pipes

(i)pipe cutter.1mks

-cutting pvc pipes

**8. State three types of surface irrigation.1½mks**

-flood

-furrow

-basin

**9. State four factors considered when choosing type of irrigation to use in a farm.2mks**

-capital availability

-topography of the area

-water availability

-type of crop to be planted

**Section B 30mks**

**10.(a)Give 6 importance of drainage as a land reclamation.3mks**

-to increase soil aeration

-to increase soil volume

-to raise soil temperature

-to increase microbial activities

-to reduce soil erosion

-to remove toxic substances

**(b)Name five methods drainage.2½mks**

-use of open ditches

-underground drain pipes

-french drains

-cambered beds

-pumping

**11. The diagram below shows a method of irigation. Use it to answer the questions that follow.**

**(a)Identify the method of irrigation illustrated above.1mks**

-drip irrigation

**(b)Give any four advantage of the method of irrigation illustrated above.4mks**

-little amount of water is used as compared to other types of irrigation

-water under low pressure can be used so long it can flow along the pipe

-discourages fungal diseases such as CBD as water does not come in to contact with the leaves

-does not encourage the growth of weeds between the rows.

**12. State the six stage of water treatments.6mks**

-filtration at water intake

-softening of water

-coagulation and sedimentation

-filtration

-chlorination

-storage

**13(i)Label the parts marked a-g 4mks**

(a) roof

(b) funnel lid with a filter

(c) Overflow pipe

(d)drainage pipe

(e)tank
(f)outlet pipe

(g) base

**(ii)Apart from the method illustrated above name any other two methods used in water collection.2mks**

-dams

-weirs

**14 .**(i)Identify the tools marked

 (a) adjustable spanner 1mk

 (b) open ended spanner 1mk

 (c) ring spanner 1mk

**(ii)Give one advantage of the spanner marked a as compared to the spanner marked b.1mk**

-can be adjusted to close or open the jaws depending on the size of nuts to be opened or tightened

**15.(a) Identify two part marked a and b in the structure drawn below.**

 (a) ridge 1mk

 (b) furrow 1mk

**(b) State one advantage of the above structure in tuber crop growing.2mks**

-allow expansion of tuber crops

-allow easy harvesting of tubers

**SECTION C 40mks (answer all the questions)**

**16.(a)Outline five reasons for carrying out minimum tillage.5x2=10mks**

-to reduce the cost of cultivation or ploughing by reducing the number of production

-to control soil erosion. mulching and cover cropping greatly reduce chances of soil erosion

-to maintain soil structure. Continuous cultivation destroys soil structures hence it should be avoided

-To conserve soil moisture. continous cultivation exposes the soil to the heat of the sun thus enhancing evaporation of available moisture.

-To prevent disturbance of roots and underground structures eg tubers

-To prevent exposure of humus to adverse conditions such as the suns heat that cause volatilization of nitrogen.

(**b)Outline five importance of water in the farm.5mks**

-for domestic purpose eg washing utensils

-for watering animals, washing animals etc

-for diluting chemicals used in controlling pest and diseases.

-used in processing of farm produce

-used in construction eg in mixing concretes

-for irrigating crops especially during dry season.

**(c)State five importance of primary cultivation.5mks**

-to remove weeds

-to bury organic matter for easy decomposition

-to facilitate water infiltration and aeration

-to destroy soil-borne pest by exposing them to predator and sun

-to make planting easy

**17.(a)Give seven maintenance practices of saws in the farm.7mks**

-teeth setting should be done

-tighten the loose screws and nuts

-straighten the blade when bent

-hang the saw properly after use to avoid possible damage

-blade should be oiled incase of long storage

-regular cleaning should be replaced or repaired

-replacing or repairing broken handles

-regular sharpening of blunt teeth

**(b)Explain four importance of water treatment in the farm.4mks**

-to kill disease causing microoganinims such as cholera and typhoid bacteria that hthrive in dirty water.

-To remove chemical impurities such as excess fluoride which may be harmful to human being.

-to remove smells and bad taste. Smells and bad taste bin water make it unfit for human consumption.

-to remove sediments of solid particles such as soil, sand and sticks. removal of this particles makes

**(c)Name any four types of soil structures.4mks**

-blocky

-platy

-prismatic

-granular

-crumby

-single grained

**(d)Name any five branches of agriculture. 5mks**

-crop production

-livestock production

-soil science

-agricultural economics

-agricultural engneering