**MWAKICAN JOINT EXAM TEAM (MJET)**

**AGRICULTURE FORM 2 MARKING SCHEME**

1. a) Entomology – study of insects and their control

b) pomology – growing of fruits

c) Apiculture – keeping or rearing of bees.

d) Olericulture – growing of vegetables (1mk each =4mks)

1. i) Food supply – Adequate food supply ensures a health population and a weathy nation

b) Source of employment – majority of the population is employed either directly or indirectly by agriculture.

c) Provision of foreign exchange- This is foreign exchange which results from sale of cash crops e.g coffee

d) Source of capital (income) – Farmers sell farm produce and get income.

e) Source of Raw materials for industries: These are farm produce sold to factories for processing

f) Provision of Market for industrial goods – Finished goods are sold to farmers for use

g) Improvement of infrastructure – Roads, markets e.t.c are constructed to ease transport of farm produce (**naming ½ mk- explanation 1mk – Any acceptable explanation = 6mks)**

1. Form of Rainfall

distribution of rainfall

reliability of rainfall

Amount of rainfall

Intensity of rainfall = ( ½ x4 = 2mks)

1. -wind

-ice

-water

-temperature

1. – Decomposition of organic matter

-encourage aerate

- cause nitrogen fixation

- Act as soil borne pests

- cause sol borne diseases 1x 4 = 4mks

1. – Rip saw cuts along the grains while cross- cut saw cuts along the grains
* Rip saw has more teeth per unit length 1x2 = 2mks
1. – wood file (Rasp)
* metal file ½ x 2 =

 b) hand scrapper

 cabinet scrapper

 spoke shave ½ x2 = 1

 c) Wood chisel

 cold chisel ½ x 2 – 1

 d) Mortise gauge

 marking gauge ½ x2 = 1mk

1. – when opening up virgin land

-Where a stalk growing crop was previously planted

-where the interval between primary and secondary cultivation is long

-where land was left farrow for a long time 1x4 = 4mks

1. Destruction of organic matter

Destruction of soil micro-organisms

Destruction of plant nutrients

Fire may spread to unintended areas 1x4 = (4mks)

1. a) Farm practices aimed at weed control with minimum soil disturbance (1mk)

b) -Mulching establishment of cover crop

-crop rotation, basin flooding ,

-timely cultivation

-timely planting use of herbicides

-slashing

-uprooting weeds 1x4 = 4mks

c) Reduce cost of cultivation

control soil erosion

maintenance of soil structure

conserve moisture

prevent root disturbance

prevent exposure of humus (1x4=4mks)

1. Weir is a barrier constructed a stream or river to raise the level of water while a dam is a barrier constructed across of dry river bed, stream or river to hold water back and form a reservoir. (2mks)
2. a) plastic pipes, rubber pipes ½ x 2 = 1mk

b) Galvanized iron pipes , Aluminium pipes ½ x 2= 1mk

1. Soda ash – softening water naming ½ x2 =1mk)

Allum – coagulation of solid particles explanation ½ x 2 = 1mk

Chlorine - killing germs (total 2mks

b) Kill diseases causing micro-organisms

Remove chemical impurities

remove bad smell an dbad taste

remove sediments of solid particles 1x4 = 4mks

1. – Domestic purposes

-livestock use

-processing of farm produce

diluting chemicals

construction of farm building

irrigation of crops 1x4 = 4mks

1. a)Raised cambered bed 1mk

b) Drainage 1mk

 -Aerates the soil

 -increase soil volume

 - raise soil temperature

 -increases microbial activities

 -reduce soil erosion

 -remove toxic substances 1x4 = 4mks

1. a) mature male pig

b mature female cattle

c) young female cattle from weaning to 1st calving

d) young female bird from eight weeks to point of lay

e) Bird kept for egg production

f) mature male rabbit or goat 1x6 = 6mks

1. – Toggenburg

-saanen

-British alpi9ne

Anglo- Nubian

Jamnapari

1. Milk supply

-meat supply

-skin /hide

-animal power

-fur 1x4 =4mks

1. a i) pick axe

ii) sickle

iii) secateurs

iv) wool shear ½ x 4 = 2mks

b) i) -Removing roots,

 -removing large stones

 - breaking heavy soils 1x1 = 1mk

1. -Good depth

 -proper drainage

-good water holding capacity

-adequate nutrient supply

-correct soil PH

-Free from excessive infestation of soil borne pests and diseases

1. Macro –nutrients are plant elements in large amounts while micro nutrients are elements needed in small amounts (2mks)
2. - root development
* stimulate nodule formation in legumes
* needed in flowering, fruits and seed formation
* hastens ripening of fruits
* involve in metabolic processes
* it is part of nucleoproteins
* strengthens plant stems 1x4 = 4mks
1. Single upper phosphates (S.S.P)

Double super phosphates ( D.S.P)

Tripple super phosphates (T.S.P)

Diamononium phosphates (D.A.P)

Mavuno planting

any other N.P.K fertilizer ½ x 4 = 2mks

1. highly hygroscopic

highly soluble in waer

short residual effect (short lived()

easily leached

have a scorching (burning ) effect

highly corrosive

highly volatile 1x4 =4mks

1. Population = Area

 spacing 1mk

= 25m x 20m

 100cm x 50cm 1mk

= 25 x 20 x 100 x 1000cm2 1mk

 100 x 50 cm2

 = 1000 stems 1mk = 4mks)

1. – law labour requirement
* healthy vigorously growing seedlings are selected for transplanting
* small seeds can be nursed into strong seedlings
* right conditions for growth can easily be provided to seedlings
* reduced seed rate
* source of income