AGRICULTURE

PAPER 1

MARKING SCHEME:

GATUNDU SOUTH SUB COUNTYJOINT EXAMINATION.

SECTION A

1 (a) It does not pollute the air ,water and soil with in organic fertilizers.

-it conserves the bio- diversity since it does not uses agro chemicals e.g pesticides ,herbicides, acaricides ,insecticides which destroy the target organism /plant together with other useful ones. 2\* 1/2 marks

b)

-to make farrow for planting seeds

-to hold the running water and controls soil erosion

-to earth up roots crops of potatoes ,and encourage maximum production

2.

-scarcity

-test and preference /preference and choice

-opportunity cost

3.

-vegetables crop nurseries

-tree nurseries

-vegetables propagation nurseries

4.

-Out compete pasture crops for growing foetus

-poison livestock e.g thorn apple.

-lower palatability of pastures eg devils house whip.

-reduce quality of livestock productions e.g maxican marigoid.

-subress pasture regrowth after defoliation.

5.

-Pesticides eg insecticides

-fertilizers

-drugs for livestocks

-herbicides to control weeds

-farm machinery tools ,equipments and impliments

6.

-size of the seed

-soil type density

-type of machine used for planting

-age of the seed

-environmental temperature

7.

- total nitrogen needs :20 kgs (N0 \*5 hectare = 100 KG (N)

-100 KG of urea =45 kg (N)

-==100/45\*100 =1000/45= 22.22 KG urea

8.

-cause leaching

-cause soil erosion

-May have water borne disease e.g typhoid.

-cause corrosion of farm machinery by hand water

-cause floods

-Carrying away of farm structures /crops-

-cause land slides

9 (a)

-number of the tittle deeds

-locationof the land

-size of the land

-identity of the owner

-type of ownership eg absolute leased hold or free hold

-condition of ownership( if any)

-Seal and signature of the issuing office

-Date of registration

b)

land is owned by an individual who either operates or leases it to another person inform of individual owner operators,landlordship and concession or company.

10.(a)

-invoice

-delivery note

-Receipts

-Purchase order

(b)

Savings

Credit facilities

Grant forms ,NGOS ,government,churches

11.

-Effective means of propagations e.g seeds dispersal ,rhizones

-production of large number of seeds eg black jacks

-high viability of seeds and for a long perioid

-excellent adaption to new and unfavourable environment

-short life cycle to evade bad condutions

12.

-step /hill lands

-swampy /marshy fields

-eroded /gulled fields tsetsefly infection areas

-arid/semi arid areas

13.

(a)

-formulation ie liquids ,wettable powder ,gramles ,herbicides

-selectivity non-selective or selective herbicides

-time of application

-mode of action eg translocation or conduct herbicides

(b)

-pinching i.e removal of terminal buds of tomatoes

-anunal pruning i.e removal of branches that have borne two crps eg in coffee

-capping /pollarding i.e cutting branches of trees tops at a specific point in order to archieve a desired shape

**SECTION B (20 MARKS)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| LIABILITIES | | | ASSETS | |  |
| Particulars | Shs. | cts | particulars | Shs | cts |
| KGGCU | 2500 | 00 | Pigs | 7000 | 00 |
| Sigma feeds | 5000 | 00 | Maize in stoke | 10000 | 00 |
|  |  |  | Potato for sale | 3000 | 00 |
|  |  |  | Fertilizers in stoke | 5000 | 00 |
|  |  |  | Feeds in stoke | 600 | 00 |
|  |  |  | Cash:banks | 5000 | 00 |
|  |  |  | hands | 300 | 00 |
|  |  |  | Beef | 3000 | 00 |
|  |  |  | milk | 5000 | 00 |
|  |  |  | Dairy cattle | 2500 | 00 |
|  |  |  | Building | 150000 | 00 |
|  |  |  | Wool sheep | 15000 | 00 |
|  |  |  | land | 10000 | 00 |
|  |  |  | Machinery |  |  |
|  |  |  | Office equipment |  |  |
| Net worth | 411800 | 00 |  |  |  |
|  |  |  |  |  |  |
|  | 419300 | 300 |  | 419300 | 00 |

(b)

Yes .the land was solvent as assets were more than liabilities by ksh.411800.00

15.

(a)

T- oxiles/sorrel (oxalis/latifolia)

U-double thorn (oxygonium/sinutum)

(b)

It has underground nuts

(c)

-competes for nutrients ,water,space and light

-harbers pestsand disease

-Increase cost of production.

-reduces quality of farm produce

16

(a)

X- Transverse /diagonal methods

1-12-zig zag methods

(b)

-name of the farmer

-address of the farmer

-field number

-date of sampling

(c)

it has a wide coverage of the whole fieldsand the sample are quite representative of the whole field i.e they are more reliable.

17

(a)

-the root system is not distributed during transplanting

-they can be transported over along distance /highly portable

-seedlings grow faster

-seedlings take shorter time than in the ground nursery

(b)

-removing the shades

-Reduce the rate of watering

18

(a)

-through denitrification

-through combustion

-through volalization

-update by pants

(b)

-Nitrates

-Ammonia ion

19

(a)

Least disturbance of the soil when growing crops

(b)

-reduce cost of production

-food produced is relatively free from chemicals

-help to reduce environmental pollution

-help to improve soil structure

-involves less labour

**SECTION C**

20.

(a)

-altitude 0-2400m above the sea level

-rainfall avarege 900 mm

-temperature( 20-30) c

-Soil ,fertilizer,well drained at ph of 6.8and 8.3

(b)

-deep ploughing with disc /mould board plough

-disc harrowing to break clods

-roter-vating to get fine tilth

-spring fine harrowing to remove trush stones asget fine drills /ridges for planting seeds

(c)

-Seeds prodcasted or planted in rows at a spacing of 33\*5 at the on set of rains .

-seeds covered to a depth of 3 cm with soil mixed with phosphatic fertilizers

-top dressing done with sulphate of ammonia at a height of 15 cm

-pest controlled by scaring , trapping ,poisoning

-disease i.e is controlled through fungal sprays , planting resistant varieties

(d)

- had cutting of individuals heads with shrp knives ,heads drying ,harvesting etc

-

21.

(a)dringing by animals and people in the farm

Cooking for by farm workers

-Washing farm structure , animals etc

-Diluting farm chemicals on the farm

-cooling machines

-media of fis rearing on the farm

-construction so farm buildings and structures

-processing farm produce

-irrigating crops during dry season

-generating hydro electric power

(b)

-timely spacing

-trap crops for trapping fields pests

-planting resistant varieries

-alternatining of environmental conditions

-timely harvesting

-closed reason

-Crop rotation

-field hggiene

-Proper crop rotation

22.

(a)

-complete

-detailed

-periodical dated

-true not fiction

-simple to read and interprate not complicated

-Legible /good hard writing /reliable

-Srong /wellbond /not farm /durable

- clean/precise/ straight to the point /summarized

(b)

Number of sellers in the market

Price expectations

Weather condition

Change in price

Production technology

Increase in supply of associated goods

Price of related goods

Government policies /regulation

Cost of production

(c)

-training labour

-farm mechanization

-labour supervision

-proper renumeratio according to qualification ,experience and actual perfomance

End.