**BSJE 2021**

**AGRICULTURE**

**PAPER 1**

**443/1**

**MARKING SCHEME**

**SECTION A (30MKS)**

1. Mutual benefit between crops and livestock
2. High output for unit area
3. Diversification (failure by one enterprise can be compensated by the other)
4. Maximum use of land

(½ ×4 =2mks)

1. To be used during dry period
2. Can be sold to generate income
3. To distribute available forage throughout the year
4. To ensure better and full use of available land

(½ ×2=1mk)

1. Prevent spread of pest and disease
2. For high germination percentage
3. To increase yield per unit area (production)

(½ ×4=2mks)

1. Participate in national ploughing contest
2. Participate in free planting
3. Participate in national show and exhibitions

(½ ×4=2mks)

1. Can be used to secure credit facilities (loan)
2. Act as security of tenure (minimize land disputes)
3. Enables the farmer to lease/sell the land or part of the land
4. The farmer can do long term and permanent investment

(½ ×2=1mk)

1. Mode of feeding
2. Crops attacked
3. Stage of development of pests
4. Stage of growth of the attacked
5. Level of damage
6. Place where they are found

(½ ×4=2mks)

1. Infrastructural development
2. Gross domestic products
3. Per capital income

(½ ×4=2mks)

1. Lack of motivation to i9nvest in farming
2. Diversification of agricultural funds to medication
3. Lack of strength to work in the farm hence low labor
4. High independency hence low living standards

(½ ×2=1mk)

1. Forage species used
2. Stage of harvesting (leaf: stem ration)
3. Length period
4. Weather condition during drying period
5. Condition of the storage structure

(½ ×4=2mk)

1. Destroy soil structure
2. Kills living organisms
3. Destroys soil organic matters/mineral
4. Lead to poor soil aeration
5. Alters soil PH

( ½ ×4=2mks)

1. Nitrate ion ( NO3-)
2. Ammonium ion (NH+4)

(½ ×2=1mk)

1. Chemical concentration
2. Weather condition
3. Market demand (price)
4. Level of maturity

(½ ×4=2mks)

1. Monopolistic market
2. Oligopolistic market
3. Monopsonistic market

(½ ×2=1mk)

1. Cultivating along the river banks
2. Excess use of fertilizers
3. Excess use of pesticides
4. Overgrazing (stocking)

(½ ×4=2mks)

1. Homesteads
2. Riverbanks
3. Slopes
4. Swampy areas

(½ ×4=2mks)

1. Should be healthy (free from pest and diseases)
2. Should be vigorously growing
3. Should be pencil thick
4. Should be 8-10cm tall
5. Should be 4-6 follage leaves

(½ × 4=2mks)

1. Invoice
2. Statement
3. Delivery note
4. Receipts
5. Purchase order

(½ × 2mks)

1. Labour utilization records
2. Mast roll labour records

( ½ ×2mks)

**SECTION B (20MKS)**

19 a) maize smart (1x1 -1mk)

b)

1. Use of certified seed
2. Use of clean planting material
3. Crop rotation
4. Proper field hygiene (1x3 -3mk)

c) Fungal disease (1x1 -1mk)

20 a)

1. Increasing production formation curve
2. Constant production formation curve (1x2 -2mks)

b) Increase in input increases output up to a point in which any additional input leads to a decrease in output (1x1 -1mk)

c) Because there are other factors that influence agricultural production apart from the factors of production e.g. environmental factors (1x1 -1mk)

21. Mrs. Sand farm balance sheet as at 30th June 2006

**Liabilities Assets**

**Long Term** **Fixed Assets**

Loan 50,000 Building -50,000

Bank Overdraft-24,000 cattle -40,000

74,000 Land -80,000 170,000

**Short Term**

Creditor-20,000 20,000 **Current Assets**

Cash -20,000

94,000 Bank-66,000

DSC Plough-16,000

Debtors -16,000

Capital 206,000 Tools -12,000

130,000

300,000 300,000

22 a) to compare drainage of different soil types (1x1 -1mk)

b)

1. sandy soil
2. loamy soil (1x2 -2mks)

c)

1. construction of cumbered beds
2. panting of trees
3. underground pipes
4. French drains (1x2 -2mks)

1. C-Black jack (1×1=1mk)

D- Oxalis (1×1=1mk)

1. Broad leaf (1×1=1mk)
2. Has the underground structure (bulbs) which goes deep/spread hence difficult to control 2×1=mk)