NANDI EAST DISTRICT JOINT EVALUATION TEST 2009

443/1
AGRICULTURE
PAPER 1
JULY/AUGUST, 2009
TIME: 2 HOURS

SECTION A: (30 MARKS)

Answer all questions in the spaces provided:

1.   State **two** Latin words used to describe agriculture.   (1 mark)
        (i)
        (ii)

2.   State **four** effects of parasites in crop production
        (i)
        (ii)
        (iii)
        (iv)   (2 marks)

3.   What are perishable crops?   (1 mark)

4.   Name three factors related to light that affects crop production and distribution in
        Kenya.   (1 ½ marks)
        (i)
        (ii)
        (iii)
        (iv)

5.   Differentiate between hydrides and composites in maize production   (2 marks)

6.   State four characteristics of variable inputs.
        (i)
        (ii)
        (iii)
        (iv)   (2 marks)

7.   List three limitations of the tenancy landlord's tenure system
        (i)
        (ii)
        (iii)

                                                                          (1 ½ marks)

8.   State two mechanical ways of controlling birds as pests in cereal crops.
            (i)
            (ii)   (1 mark)

9.   Define the term agricultural economics.   (1 mark)

10.   State the law of demand.   (1 mark)

11.   Outline two properties of clean and safe water.
            (i)
            (ii)   (1 mark)

12. Outline four roles of agricultural Society of Kenya(ASK)
            (i)
            (ii)
            (iii)
            (iv)   (2 marks)
            (v)

13.   Outline the use of a journal as a financial book of accounts.   (1 mark)

14.   What is a fertilizer grade?   (1 mark)

15.   State four methods of budding.
        (i)
        (ii)
        (iii)
        (iv)   (2 marks)

16.   Differentiate between Gross Domestic Product (GDP) and
        Gross National Product (GNP).   (2 marks)

17.   What is a vegetable crop?   (1 mark)
18.   List four agents of physical weathering.   (1 mark)
        (i)
        (ii)
        (iii)
        (iv)   (2 marks)
19.   List any two marketing functions   (1 mark)
        (i)
        (ii)
20   what is the main difference between a concentrate and a roughage. (1 mark)
21.   List four methods used when harvesting trees in agro-forestry.
        (i)
        (ii)
        (iii)
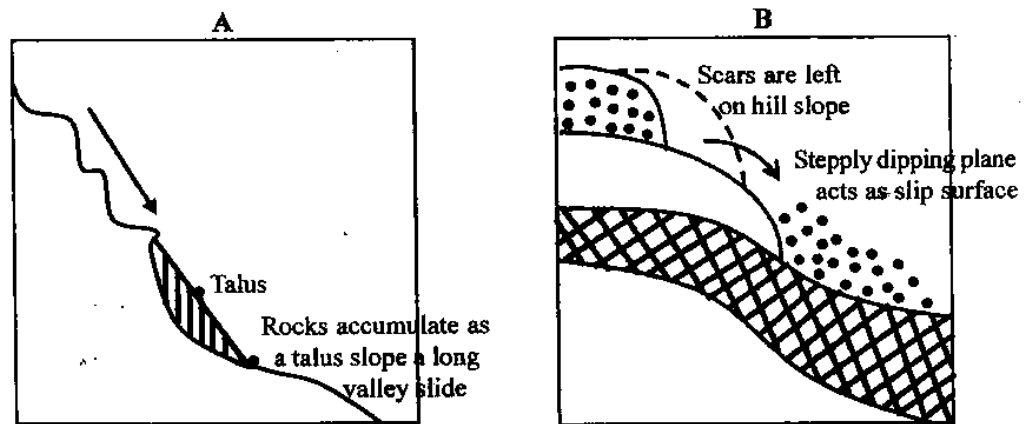   (iv)   (2 marks)

SECTION B: (20 MARKS)
Answer all questions in the spaces provided:

22. (a) Explain what is meant by "Marginal product" in production economics.
(½ mark)
    (b) Carefully study the table below and then answer the questions that follow;

Changes in output resulting from increase in labor;

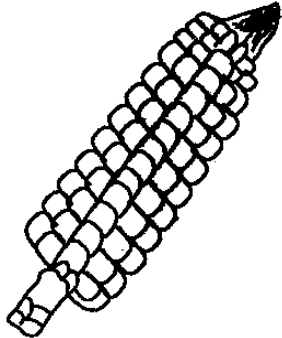| Land (ha)	Labour (man-days)	Total product(bagS)	Marginal product (bag)	Average products (bags)
1	1	3		3
1	2	7		
1	3	12		
1	4	16		
1	5	19		
1	6	21		

   (i) Name the various input in table above. (½ mark)
   (ii) Name the fixed input (½ mark)

23. Study the diagrams and answer the questions that follow:

   (i) Identify the two types as landslides A and B.
      A:
      B: (1 mark)
   (ii) State what is indicated by the arrow in diagram (A) (1 mark)
   (iii) Apart from the above types as landslides, name three other types.
(1 ½ marks)
   (iv) List three areas where landslide (A) is commonly found in Kenya.

24.   Below is a dry maize cob ready for shelling.

(a)   What is the right moisture for storage for the above grains?   (1mark)
(b)   How is the above moisture attained in the stored grains   (1 mark)
(c)   What would happen to stored grains under high humidity.   (1 mark)
(d)   When human feed on grains in (c) what are the consequences.   (1 mark)

25.   (a)   What is nitrogen fixation?   (1 mark)

(b)   A farmer was advised to apply 150kg 5A/ha; while topdressing Tomatoes .
SA contain 21% Nitrogen. Calculate the amount of nitrogen required for
topdressing two hectares.(show your working)   (3 marks)

SECTION C: (40 MARKS)
Answer any two questions in this section in the spaces provided after question 28.

26   (a)   At the end of the 2007 the records of Lelgotet farm in Tindiret were as
follows;
It's opening Valuation Kshs. 220,000, The expenses, Vet nary bills Ksh
4,800.000 bought animal feeds at Ksh;53,000.00 paid rent Ksh. 120,000.00
Debits payable Ksh; 24,000.00
At the same time its closing valuation was Ksh; 250,000.000, sold bull calves
at ksh; 16,700.000, sold culled heifers and cows at Ksh;300,00.00, sold
manure Ksh; 90,000.000 and milk Ksh; 360, 450.00 and its debt receivable
was Ksh; 47,500.00 and milk Ksh;e60, 450.00 and its debt receivable was
ksh47,500.000

(a)   (i)   using the above information, draw a profit and loss account of
the farm.   (9 marks)
(ii)   Was there any profit or loss made and by how much?   (1 mark)
(b)   (i)   Define a partial budget.   (2 marks)

(ii)   Mr. Chepkwony had the following enterprises;-

0.3 ha of sukuma wiki and wanted to replace with cabbages the following season.
The fertilizer would be increased from two bags per ha for sukuma wiki to 2,5 bags per ha for cabbages and extra 40 man days for casual labour per ha. The average yield for sukuma wiki and cabbages are 50 bags and 90 bags per ha respectively. Their prices are sukuma wiki Kshs. 1,200/= per bag and cabbages Ksh. 300/= per bag, seeds cost are Ksh. 1.350/= per 10 sachet, sukuma wiki and Ksh. 2000 per 10 sachets cabbages.

DAP ferterlizer cost Kshs. 1,400.00 per 50kg bag. Labour is paid at Ksh; 150,000 per man day. He would require 10 sachets of cabbages and a sachet of sukuma wiki. Seed to cover 0.3 ha.

      (ii)   (a)   Draw a partial budget using the above information.   (6 marks)
      (iv)   Is the change worthwhile   (2 marks)

   27.   Describe the field production of tomatoes under the following sub-headings;
      (a) Ecological requirement   (4 marks)
      (b) Transplanting   (6 marks)
      (c) Field operations.   (6 marks)
      (d) Diseases control.   (4 marks)
  28.   (a)   Explain the harmful effects of weeds.   (9 marks)
        (b)   Explain the beneficial effects of weeds   (5 marks)
        (c)   Describe the factors contributing to competitive ability of weeds.
                                                                   (6 marks)