

GEM SUB-COUNTY JOINT EVALUATION EXAMS 2016

443/1

AGRICULTURE**PAPER 1****SECTION A (30 marks)**Answer ALL questions in this section on the spaces provided.

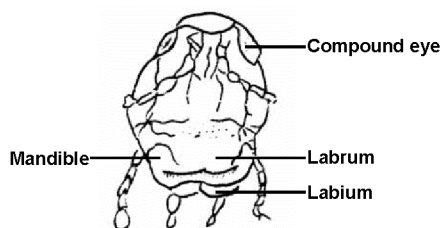
1. Distinguish between GDP and GNP (2 marks)
2. Name FOUR types of terraces. (2 marks)
3. List FOUR ways used in water harvesting. (2 marks)
4. Mention FOUR advantages of land consolidation. (2 marks)
5. State FOUR ways in which pesticides kill pests. (2 marks)
6. State FOUR deficiency symptoms of potassium in plants. (2 marks)
7. Mention FOUR practices that enhance minimum tillage. (2 marks)
8. Name FOUR practices that will increase light reaching a crop. (2 marks)
9. State TWO factors that determine the implement used in primary cultivation. (1 mark)
10. Name any FOUR records a wheat farmer should have on the farm. (2 marks)
11. List THREE methods of harvesting trees. (1½ marks)
12. Give four advantages of sprinkler irrigation. (2 marks)
13. Using the data provided in the table below, make an interpretation and advise the farmer on which crop to grow. (1 mark)

Type of crop	Gross margin (Kshs)
Cotton	19,700
Groundnuts	23,600

- ii) Give a reason for your answer above. (1 mark)
14. How are hardpans caused by cultivation? (2 marks)
15. List three branches of horticultural farming. (1½ marks)
16. Distinguish between topping and top-dressing. (2 marks)

SECTION B (20 marks)

17. Observe the diagram below and answer the questions that follow.



- a) Identify the mode of feeding exhibited by a pest having such features. (1 mark)
- b) Name any FOUR pests with the above feeding habits. (2 marks)
18. A farmer is to apply a fertilizer 20 : 30 : 10 on a vegetable plot measuring 5m by 8m at the rate of 200kg/ha.
 - a) Calculate the amount of fertilizer the farmer requires for the plot. (4 marks)
 - b) Name the type of fertilizer used in (a) above. (1 mark)
19. State five functions of Agricultural marketing. (5 marks)
20. The diagram below gives an illustration of a farm record. use it to answer the questions that follow.

Enterprise

Month

Name of cow	Days in month																
	1		2		3		4		5		6		7		8		
	Am	Pm	Am	Pm	Am	Pm	Am	Pm	Am	Pm	Am	Pm	Am	Pm	Am	Pm	

- a) Name the type of farm record illustrated above. (1 mark)
- b) Give three reasons for keeping health records in livestock production. (3 marks)
- c) Give three pieces of information a dairy farm manager should collect for planning purposes. (3 marks)

SECTION C (40 marks)

Answer ANY TWO questions in this sections.

21. a) List eight common problems that might have led to collapse of many co-operative societies. (8 marks)
 b) Describe methods of improving labour productivity. (5 marks)
 c) Outline and SEVEN general post-harvesting practices carried out on crops. (7 marks)
22. a) Discuss TEN ways through which the soil loses fertility. (10 marks)
 b) Study the table below and answer the questions that follow.

Land (ha)	NPK fertilizer input (kg)	Total maize production (90 kg bags)	Marginal production (90 kg bags)
1	0	10	
1	40	17	
1	80	33	
1	120	52	
1	160	64	
1	200	70	
1	240	73	
1	280	75	
1	320	75	
1	360	68	

- i) Calculate the marginal product from the table. (5 marks)
 ii) What is variable input. (2 marks)
 iii) At what point of fertilizer input does the law of diminishing return start to operate. (1 mark)
 iv) State TWO risks and uncertainties in the farm. (2 marks)
23. a) Describe the production of tomatoes under the following sub-heading.
 i) Transplanting. (5 marks)
 b) Mention FIVE importance of organic matter in the soil. (5 marks)
 c) State TEN uses of water in the farm. (10 marks)