

2802/102
CATERING PREMISES, EQUIPMENT
AND MATHEMATICS
June/July 2017
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN FOOD AND BEVERAGE MANAGEMENT
MODULE I

CATERING PREMISES, EQUIPMENT AND MATHEMATICS

3 hours

INSTRUCTIONS TO CANDIDATES

You should have a non-programmable scientific calculator for this examination.

*This paper consists of **TWO** sections; **A** and **B**.*

*Answer question **ONE** and any other **THREE** questions from Section **A**.*

*Answer question **SIX** and any other **THREE** questions from Section **B**.*

*Show all your working in Section **B**.*

*Answers to all questions **must** be written in the answer booklet provided.*

Maximum marks for each part of a question are indicated.

Candidates should answer the questions in English.

This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A: CATERING PREMISES AND EQUIPMENT (50 marks)

Answer question ONE (Compulsory) and any other THREE questions in this section.

1. (a) State **Two** importance of windows and doors in a production kitchen. (4 marks)
- (b) (i) State **two** importance of plumbing in the kitchen. (2 marks)
- (ii) Highlight **two** disadvantages of using hard water in a catering premises. (2 marks)
- (c) Differentiate between fry plate and infra-grills. (4 marks)
- (d) Outline the procedure of cleaning a steamer. (4 marks)
- (e) Explain the meaning of each of the following:
 - (i) hazard; (2 marks)
 - (ii) safety. (2 marks)
2. State **five** advantages of indirect system of water supply. (10 marks)
3. Describe **five** factors affecting tenancy. (10 marks)
4. (a) Distinguish between each of the following types of waste disposal:
 - (i) disposal units and compactors; (4 marks)
 - (ii) bins and chutes. (4 marks)
- (b) Highlight **two** advantages of incineration method of disposal. (2 marks)
5. (a) Identify **six** duties of a catering manager. (6 marks)
- (b) Differentiate between commercial and welfare catering. (4 marks)

SECTION B: MATHEMATICS (50 marks)

Answer questions **SIX (compulsory)** and any other **THREE** questions from this section.

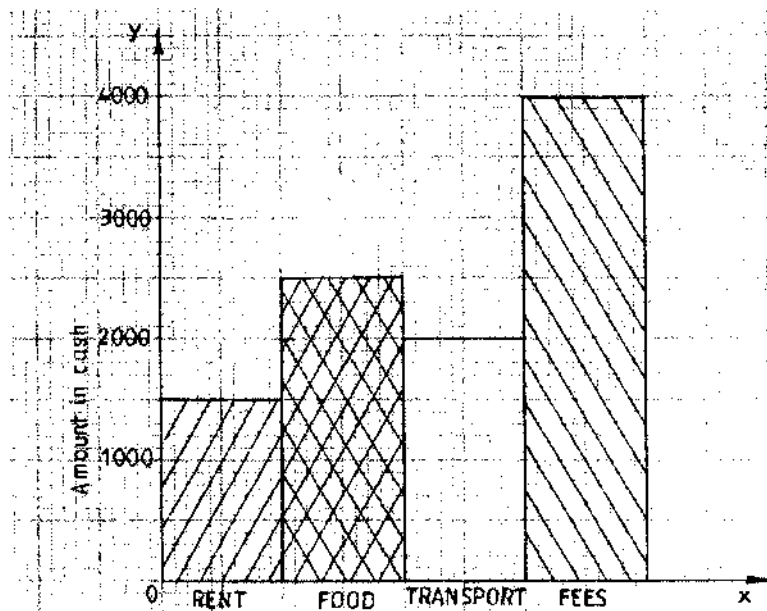
6. (a) A poultry farmer collected 26,238 eggs which were packed in trays of capacity of 30 eggs each. Determine how many more eggs were needed to fill the last tray. (4 marks)
- (b) Given that the volume of a cuboid is 12.6 litres, determine its height if its length is 30 cm and width is 28 cm. (4 marks)
- (c) Sabina bought 300 oranges for Ksh 1500 and sold them in piles of 6 for Ksh 20 per pile. Determine the percentage loss. (4 marks)
- (d) Five people can paint three rooms in three weeks. Determine the number of people working at the rate that will paint six similar rooms in fifteen days. (4 marks)
- (e) Given that the equation of a straight line is $-\left(\frac{x}{4} - 2y\right) = 1$, determine its gradient. (4 marks)

7. Table 1 shows the heights in centimetres of 100 tree seedlings.

Height (cm)	10-19	20-29	30-39	40-49	50-59	60-69
Number of Seedlings	9	16	19	26	20	10

Calculate the quartile deviation of the heights. (10 marks)

8. The bar graph represent the expenditure of a student in a month.



Illustrate the information on a pie-chart. (10 marks)

9. (a) The supply of a vaccine to a college clinic depends entirely on two firms X and Y. The probability of firm X failing is 0.1 and the probability of Y failing is 0.2.

(i) Represent the information on a tree diagram. (2 marks)

(ii) Determine the probability that at least one firm delivered the vaccine. (2 marks)

- (b) Without using a calculator, prove that:

$$\frac{11 \times 6! - 18 \times 5!}{4 \times 6} = 2 \quad (6 \text{ marks})$$

10. (a) Table 2 show the exchange rates of a foreign currency by a Kenyan bank. Use it to answer the following question.

	Buying	Selling
1 Canadian Dollar (Can \$)	62.07	64.15

A tourist from Canada converted 101,200 Canadian Dollars to Kenya shillings for hotel accommodation and other miscellaneous expenses while in the country. His expenditure was as follows:

Hotel accommodation for 40 days at the rate of Ksh 9,000 per day full board, hire a self driven car at Ksh 7,000 per day, bought curios worth Ksh 15,000 and he donated the rest to a children's home. Calculate the amount of money he donated in Kenya shillings.

(7 marks)

- (b) The books of account for a self-help groups were as follows:

Opening stock = Ksh 100,000
 Closing stock = Ksh 60,000
 Rate of stock turnover = 6 times

Calculate, the cost of sales. (3 marks)

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