

Candidate's Name: _____

Index No: _____

2802/102

CATERING PREMISES,
EQUIPMENT AND MATHEMATICS

Oct/Nov. 2015

Time: 3 hours



Candidate's signature: _____

Date: _____

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN FOOD AND BEVERAGE MANAGEMENT

MODULE I

CATERING PREMISES, EQUIPMENT AND MATHEMATICS

3 hours

INSTRUCTIONS TO CANDIDATES

*Write your name and index number in the spaces provided above.**Write the date of the examination and sign in the spaces provided above.**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 in Section A.**Answer question SIX and any other THREE questions from Section B in the spaces provided.**Show all your working in Section B.**Maximum marks for each part of a question are indicated.*

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1	20	
		10	
		10	
		10	
B	6	20	
		10	
		10	
		10	
Total Score		100	

This paper consists of 16 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 (50 marks)

Answer question **ONE** and any other **THREE** questions in this section.

1. (a) Highlight one function for each of the following in a catering premises:
- (i) floors,
 - (ii) windows,,
 - (iii) doors,
 - (iv) pillars.
- (4 marks)
- (b) State **one** use of each of the following equipment:
- (i) baine-marie,
 - (ii) salamander,
 - (iii) oven,
 - (iv) blender.
- (4 marks)
- (c) Outline the first aid procedure given to a chef who has cut himself. (4 marks)
- (d) Explain **four** ways in which a chef can protect his staff from any possible danger at the work place. (4 marks)
- (e) Highlight **four** factors influencing maintenance in a catering premises. (4 marks)
2. (a) Describe each of the following non-chemical methods of pest control:
- (i) sanitation;
 - (ii) temperature;
 - (iii) traps.
- (6 marks)
- (b) Outline the steps to observe when treating a chef who has suffered from the following:
- (i) electric shock;
 - (ii) nose bleeding.
- (4 marks)
3. (a) Highlight **four** reasons why water is important in a food operation sector. (4 marks)
- (b) Explain the **three** methods of water treatment that would ensure safe water in a food production area. (6 marks)
4. (a) (i) Describe a bratt pan (2 marks)
- (ii) Identify **four** uses of a bratt pan. (2 marks)

- (b) Differentiate between convention and steam ovens. (4 marks)
- (c) Explain **two** advantages of using a convention oven. (2 marks)
5. Explain **five** precautions that should be taken when using electrically operated machines. (10 marks)

SECTION B: (50 marks)

Answer question SIX and any other THREE questions in this section.

6. (a) With aid of a number line, perform each of the following operations.
- (i) $3 - (-5)$ (2 marks)
- (ii) $-2 + (-3)$ (2 marks)
- (b) Two empty boxes weigh x kg and $2x$ kg contains y and $3y$ pieces of scones respectively. If each scone weighs 20 grams, calculate the total weight of the two boxes and scones in terms of x and y . (4 marks)
- (c) A committee of students council is to be selected randomly from a group of 7 boys and 8 girls. Calculate the probability of selecting two girls and one boy. (4 marks)
- (d) A hotel prepares 2400 pieces of biscuits at a cost of Ksh.750. It sells them in boxes of 120 at Ksh.60 per box. What profit does the hotel make from each box? (4 marks)
- (e) The scores of five girls in a test are 5, 7, 8, 11 and 14. If the scores are represented on a pie-chart, calculate the sum of angles representing the lowest and the highest scores. (4 marks)
7. A poultry farmer buys 600 one-day old layers chicks at a cost of Ks.60 each. For the first six months he spends a total of Ksh.224,000 on feeds, medication and labour. After six months, the hens start laying continuously for the next 18 months at the rate of 70% per day each laying an egg per day. During the laying period the hens consume one bag of complete layers feed per day at a cost of Ksh.1000 per bag.
- Calculate:
- (a) the total expenditure incurred in the entire period (Take 1 month = 30 days). (3 marks)
- (b) the number of trays of eggs the hens produce for the entire laying period (Take 1 tray = 30 eggs) (2 marks)

- (c) the amount earned from selling the eggs given that each tray was sold at Ksh.130. (2 marks)
- (d) the percentage profit generated by the entire venture if the hens are finally sold for Ksh.200 each. (3 marks)

8. Figure 1 shows a water tank used by a hotel.

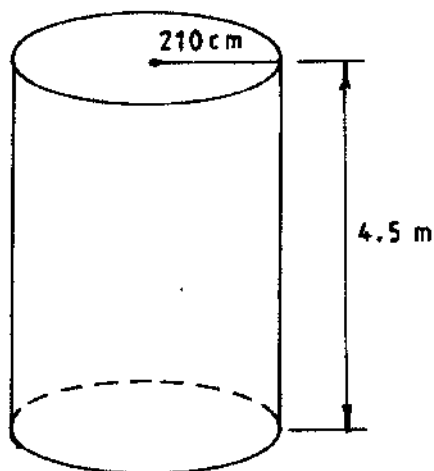


Figure 1

- (a) Calculate the capacity of the tank in litres. (4 marks)
- (b) The hotel uses 5000 litres of water in a day. Determine how many days will the water from this tank last when the tank is $\frac{3}{4}$ full. (4 marks)
- (c) The hotel acquires water at a rate of Ksh.1.25 per litre. Determine the cost of the full tank. (2 marks)

9. Table 1 shows the values of x and y for the equation $2y = 6x + 1$.

- (a) Fill in the table the missing values and hence draw the corresponding graph on the grid provided on the back page. (6 marks)

x	-2	-1	0	1	2
y			$\frac{1}{2}$		

Table 1

- (b) Use your graph to determine:
- (i) the y -intercept (1 mark)
- (ii) the gradient of the line. (3 marks)

- 10. A study was carried out to determine the amount of yeast used to prepare a cake of standard size. *Table 2* shows the result of the study.

Amount of yeast in grams	Frequency
10 - 14	6
15 - 19	10
20 - 24	11
25 - 29	14
30 - 34	6
35 - 39	3

Table 2

- (a) State the modal class. (2 marks)
- (b) Estimate the mean weight. (8 marks)
