

2802/102

CATERING PREMISES, EQUIPMENT  
AND MATHEMATICS

Oct. /Nov. 2018

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 science calculator for this examination.*

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

*Answer question ONE and any other THREE questions in section A and question 6 and any other THREE questions from section B, in the answer booklet provided.*

*Maximum marks for each part of a question are as indicated.*

*Candidates should answer the questions in English.*

**This paper consists of 5 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) State **four** factors to consider when choosing fuel. (4 marks)
- (b) Highlight **four** qualities of a good kitchen floor. (4 marks)
- (c) Outline the precautions to take when using a potato peeler. (4 marks)
- (d) Highlight **four** benefits of a good kitchen 'work flow'. (4 marks)
- (e) Identify **four** advantages of using microwave ovens. (4 marks)
2. As a supervisor in a five class establishment, explain **five** safety rules to be observed by your staff to avoid accidents in the kitchen. (10 marks)
3. (a) \* Identify **two** attributes of a first aider. (2 marks)
- (b) Explain **four** ways a manager can ensure that kitchen staff is working in a conducive environment. (8 marks)
4. (a) Outline the procedure of clearing internal blockages in the kitchen. (4 marks)
- (b) Explain **six** actions you will take in events of fire in the kitchen. (6 marks)
5. Explain **five** non-chemical pest control methods in a catering establishment. (10 marks)

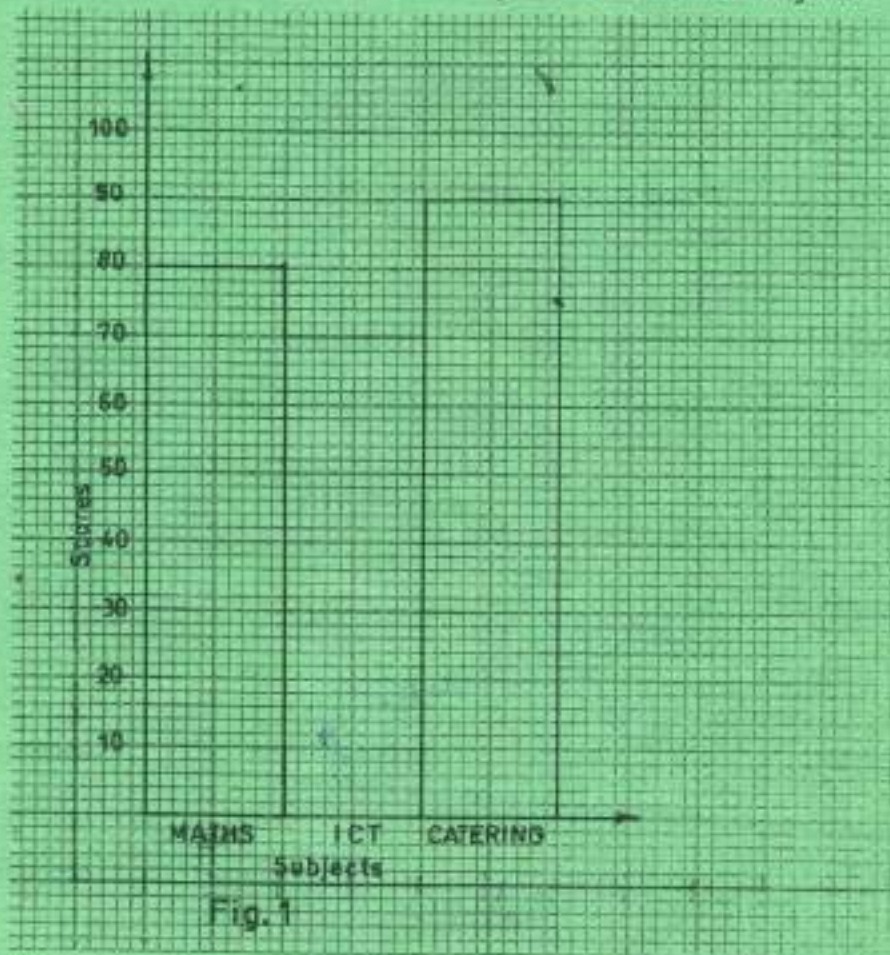
**SECTION B: MATHEMATICS (50 marks)**

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

6. (a) Without using a calculator, evaluate:  

$$\frac{1}{2} \text{ of } 96 \div 6 \times 3 + 2 - 1$$
 (4 marks)
- (b) Jane takes 6 hours to prepare a carton of cakes. Ombabi takes 12 hours to prepare similar numbers of cakes. If both Jane and Ombabi prepare the same number of cakes, how long will they take. (4 marks)

- (c) Figure 1 shows the scores obtained by a student in three subjects.



Represent the information on a pie chart.

(4 marks)

- (d) A rectangular kitchen floor measuring 8.5 m by 5 m is to be covered with square tiles measuring 50 cm by 50 cm. Determine the number of tiles required to cover the floor completely. (4 marks)
- (e) The mean weight of four students is 48 kg. Three of them weigh 52 kg, 47 kg and 49 kg. Determine the weight of the fourth student. (4 marks)

7. (a) Aisha bought fruits for a price of Ksh 400 for a bundle of 30. If she later sold them for a bundle of 40 for Ksh 600. Determine:

(i) the profit she made after selling 1080 fruits; (4 marks)

(ii) her percentage profit; (2 marks)

- (b) Solve for  $x$  in the given equation:

$$\frac{x}{8} + \frac{x}{12} + 1 = -2$$

(4 marks)

8. Table 1 shows the mass in grammes of 40 buns:

Table 1

Mass (g)	Frequency
31 - 40	8
41 - 50	14
51 - 60	15
61 - 70	3

Calculate:

- (i) the mean mass; (5 marks)
- (ii) the standard deviation. (5 marks)
9. (a) A Kenyan travelling to USA bought US\$ 5,000 from a Kenyan bank. She spent US\$ 1,000 on a return ticket and US\$ 1,750 while in USA. Upon her return she sold the remaining dollars. The Kenyan banks traded with the dollar as shown in table 2.

Table 2

Currency	Buying price (Ksh)	Selling price (Ksh)
1 US\$ (Dollar)	88.4	88.7

- (i) Determine the amount in Kenyan shillings she paid the bank to get US\$ 5,000. (2 marks)
- (ii) How much in Kenyan shillings did she get after selling the remaining amount to the bank. (3 marks)
- (b) Apollo bought 3 kg of sugar each at Ksh 120, 2 loaves of bread each at Ksh 45 and 4 packets of milk each at Ksh 50.
- (i) Determine the amount she paid for the goods. (3 marks)
- (ii) How much would she have paid for the goods had she been allowed a 15% discount? (2 marks)

10. A Straight line has the equation:

$$2x - y = -4.$$

(a) Determine:

- (i) its gradient (2 marks)
- (ii) x-intercept (2 marks)
- (iii) y-intercept (2 marks)

(b) On the grid provided, plot the line  $2x - y = -4$  in the range  $-3 \leq x \leq 1$ . (4 marks)

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