

2404/306

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2411/306

LABORATORY PRACTICE AND MANAGEMENT

June/July 2020

Time: 3 Hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**DIPLOMA IN APPLIED BIOLOGY
DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
DIPLOMA IN ANALYTICAL CHEMISTRY**

LABORATORY PRACTICE AND MANAGEMENT

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Battery operated scientific calculator.

This paper consists of TWO sections; A and B.

Answer ALL the questions in section A and any THREE questions from section B.

Each question in section A carries 4 marks while each question in section B carries 20 marks.

Maximum marks for each part of a question are indicated.

Candidates should answer the questions in English.

This paper consists of 3 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 (40 marks)

Answer ALL the questions in this section.

1. (a) Distinguish between first and second degree burn. (2 marks)
- (b) Describe how mustard is administered as an emetic. (2 marks)
2. (a) Give any two reasons for washing laboratory apparatus immediately after use. (2 marks)
- (b) Explain why aquaregia should never be used to clean platinum ware. (2 marks)
3. State four types of plans in management. (4 marks)
4. (a) Define the following terms as used in glass blowing:
 - (i) deritrification; (1 mark)
 - (ii) carbonizing. (1 mark)
- (b) Describe formation of bloom on glass. (2 marks)
5. Explain the installation of mercury barometer for use in the laboratory. (4 marks)
6. Highlight two advantages and two disadvantages of Terrazo laboratory floors. (4 marks)
7. Outline the bleeding procedure on a rabbit ear. (4 marks)
8. Differentiate between dispute of rights and dispute of interest. (4 marks)
9. Describe use of the following documents in purchasing:
 - (i) credit note; (2 marks)
 - (ii) quotation. (2 marks)
10. Differentiate between a valve and a flange. (4 marks)

SECTION B (60 marks)

Answer any **THREE** questions from this section.

11. Explain the steps followed in a suitable management control process. (20 marks)
12. Discuss safety with respect to:
- (a) storage of gas cylinders. (10 marks)
- (b) valves and fitting of gas cylinders. (10 marks)
- * 13. (a) Outline the steps in processing of a black and white film to a negative. (12 marks)
- (b) State any **four** precautions to be taken while preparing developer solution. (4 marks)
- (c) State any **four** applications of photography. (4 marks)
14. (a) (i) Define the term organisational chart. (2 marks)
- (ii) State the importance of organisational chart. (2 marks)
- (b) Outline the major causes of industrial disputes. (16 marks)
15. (a) Differentiate between:
- (i) burn and scald;
- (ii) an aperient and an emetic. (4 marks)
- (b) Outline the first aid treatment of a victim of gas poisoning. (4 marks)
- (c) Outline the artificial respiration (mouth to mouth) procedure. (8 marks) ←
- (d) State **four** routes of transmission of poison in the body. (4 marks) ✓

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