

# FORM FOUR END OF SECOND TERM EXAM

Kenya Certificate of Secondary Education

BIOLOGY  
PRACTICAL

July/ August 2018

## CONFIDENTIAL INSTRUCTIONS

---

The information contained in this paper is to enable the head of the school and the teacher incharge of Biology to make adequate preparations for this year Evaluation Examination. NO ONE ELSE .should have access to this paper or acquire knowledge either directly or indirectly. The teacher incharge of Biology should not perform any of the experiments nor make the results of this experiments available to the candidates or give any other information related to this experiment to the candidates.

### Each candidate will require:

1.

- Zebrina / Tradescantia with flower labelled K.
- Hibiscus twig with flowers labelled L.

2.

- Large potato tuber
- Hydrogen peroxide.
- 6 - test tubes
- Mortar and pestle
- Distilled water in wash bottles
- Iodine solution.
- Benedict solution.
- 2 boiling tubes.
- 4 means of heating / Bunsen burner.
- A pair of forceps.
- Test tube pasas
- White bile.
- 3-droppers.
- 10ml measuring cylinder.

3. Photograph B and C

# FORM FOUR END OF SECOND TERM EXAM

Kenya Certificate of Secondary Education

PHYSICS  
PRACTICAL

July/ August 2018

**CONFIDENTIAL INSTRUCTIONS**

---

## INSTRUCTIONS TO SCHOOLS

The information in this paper is to enable the head of the school and the teacher in charge of Physics to make adequate preparations for this year's Physics practical examination. NO ONE ELSE should have access to this paper or acquire knowledge of its contents. The teacher in charge of physics should NOT perform any of the experiments in the same room as the candidates or make the results of the experiment available to the candidates or give any other information related to the experiments to the candidates. Doing so will constitute an examination irregularity which is PUNISHABLE.

Each candidate should be provided with the following:

### **Question 1**

- A millimeter
- A voltmeter
- A resistance wire mounted on a mm scale
- A switch
- Six connecting wires each with a crocodile clip on one end.
- A new dry cell (Size D) and cell holder.
- A micrometer screw gauge (may be shared)

### **Question 2**

- Two metre rules.
- One half meter rule.
- A pair of vernier callipers (may be shared)
- A stopwatch.
- Two retort stands, two bosses and two clamps.
- Two pieces of thread.
- Some cellotape.

# FORM FOUR END OF SECOND TERM EXAM

## Kenya Certificate of Secondary Education

### CHEMISTRY

### PRACTICAL

July/ August 2018

### CONFIDENTIAL INSTRUCTIONS

#### Instructions to schools;

The information contained in this paper is to enable the head of the school and the teacher in charge of chemistry to make adequate preparation for Chemistry practical examination. NO ONE ELSE should have access to this paper or acquire knowledge of its content. Great care must be taken to ensure that the information herein does NOT reach the candidates either directly or indirectly. The teacher in charge of chemistry should not perform any of the experiments in the same room as the candidates nor make the results of the experiments available to the candidates or give any other information related to the experiment to the candidates. Doing so will constitute an examination irregularity which is PUNISHABLE.

In addition to the normal laboratory fittings and apparatus, each candidates should have the following:

#### Requirements:

1. 250cm<sup>3</sup> of solution W; 2.0 HCl<sub>(aq)</sub>
2. Five 2cm long magnesium ribbons.
3. 120cm<sup>3</sup> of solution R; 0.5M Na<sub>2</sub>CO<sub>3(aq)</sub>.
4. One 100ml and one 10ml measuring cylinders.
5. Three conical flasks.
6. One stop watch.
7. A piece of label
8. 500ml distilled water.
9. One burette (50ml).
10. One 25ml pipette and pipette filler.
11. One complete retort stand.
12. One white tile.
13. About 1.0g of solid K
14. Six test tubes on a test-tube rack.
15. Bunsen burner nad lighter.
16. Blue litmus
17. Red litmus
18. Two boiling tubes.
19. About 0.2g of NaHCO<sub>3</sub> solid.
20. About 1.0g of solid S
21. Metallic spatula

#### ACCESS TO

1. Phenolphthalein indicator.
2. 2M NaOH<sub>(aq)</sub>
3. 0.5M NaCl<sub>(aq)</sub>
4. 2M NH<sub>4</sub>OH<sub>(aq)</sub>
5. 0.5M Ba(NO<sub>3</sub>)<sub>2(aq)</sub>
6. 2M HNO<sub>3(aq)</sub>
7. MnO<sub>4(aq)</sub><sup>-</sup>/H<sup>+</sup><sub>(aq)</sub>
8. Bromine water.

#### PREPARATIONS:

1. Solid K is hydrated aluminium ammonium sulphate.
2. Solid S is maleic acid.
3. Preparation of KM<sub>n</sub>O<sub>4(aq)</sub> / H<sup>+</sup><sub>(aq)</sub>  
Dissolve 3.16 of solid KMnO<sub>4(s)</sub> in 200cm<sup>3</sup> of 2MH<sub>2</sub>SO<sub>4(aq)</sub> making it up to one litre using distilled water.
4. Preparation of bromine water.  
Dissolve 1.0ml of bromine liquid in 100cm<sup>3</sup> of distilled water.

# **FORM FOUR END OF SECOND TERM EXAM**

Kenya Certificate of Secondary Education

GEOGRAPHY

PAPER - 312/1

July/ August 2018

**CONFIDENTIAL INSTRUCTIONS**

---

Provide map Oyugis (E. Africa 1 : 50,000) (Kenya) 130/1

# **FORM FOUR END OF SECOND TERM EXAM**

Kenya Certificate of Secondary Education

HOMESCIENCE (CLOTHING CONSTRUCTION  
PAPER - 2

July/ August 2018

**CONFIDENTIAL INSTRUCTIONS**

---

Each candidate to be provided with a fabric

1. light weight poplin fabric 65cm by 90cm wide.
2. sewing matching thread
3. sewing machines and pressing tools.