

**NAMIBIA SENIOR SECONDARY CERTIFICATE**

**PHYSICAL SCIENCE HIGHER LEVEL**

**8322/3**

PAPER 3 Practical Test

**2020**

**INSTRUCTIONS TO SUBJECT TEACHERS**

HIGHER LEVEL

This document consists of **6** printed pages and **2** blank pages.



Republic of Namibia

**MINISTRY OF EDUCATION, ARTS AND CULTURE**

## Instructions for the Physical Science Practical Test Invigilator

### A Assistance to candidates

The purpose of the Physical Science practical test is to assess the candidates' ability to apply their skills related to practical work. This is done by requesting the candidates to perform simple experiments in the laboratory. Therefore, the candidates' ability to do practical work should not be hindered by the failure of apparatus. In order to overcome difficulties that candidates might experience during the practical test, the invigilator should (or allow the Physical Science teacher to) assist candidates in cases where equipment is malfunctioning or materials are not giving the expected results. Teachers should test the equipment like Bunsen burners regularly in advance.

The following regulations must be strictly adhered to.

- No assistance may be announced to the whole class.
- A candidate who is unable to proceed and require assistance must inform the invigilator and state the difficulty.
- A report must be written of any assistance given to a candidate, with the Candidate Name and Candidate Number.

### B Number of sets of apparatus

Each work station should have enough equipment for one candidate at the beginning of each practical session. Candidates are not allowed to share equipment unless stated differently in the equipment list. It is advisable to have a few spare sets to avoid candidates from being delayed due to disfunctional equipment.

The order in which a candidate attempts the questions is unimportant.

**(For further instruction, see attached brief Guide of Invigilator's instructions)**

**Question 1: Physics**

***Each candidate should be provided with the following:***

- 1 × retort stand
- 1 × boss head
- 1 × clamp to be fastened in the boss head, and to hang the spring on
- 1 × spring, of size 22 mm x 15 mm diameter with 2 loops overall length 50 mm
- 1 × 100 g mass hanger.
- 6 × 100 g slotted mass pieces to hang onto the mass hanger
- 1 × metre ruler/ stick with mm and cm scale printed on clearly
- 6 × office elastics bands
- 1 × roll of sellotape
- Scissors and coloured card to cut a point

**Question 2: Chemistry**

***Each candidate should be provided with the following:***

- Four protective latex gloves
- Access to cleaning tissues kitchen paper
- Protective laboratory coat
- Protective goggles
- Dust cap for the nose
- Small roll of tear off sellotape
- Permanent marker pen and one sheet of pastel colour (pale blue, yellow or pink) A4 copy paper
- Scissors
- 1× test tube rack
- 9× test tubes suitable for heating, test tube pegs/ tongs
- Heating source/ gas burner/ Bunsen or spirit burner
- Three small reagent bottles / test tubes / petri-dish with lid, labelled **A**, **D** and **E**
- **A** should contain 50 g of Copper (II) sulfate solid
- **D** should contain 50 g Ammonium chloride (crystals), solid.
- **E** should contain 50 g dry pool acid, solid.
- A water wash bottle containing 250 ml distilled water
- Access to three red litmus papers, three blue litmus paper, 1 small ball of cotton wool
- Cleaning cloth / kitchen towel
- Waste basin
- 1× Spatula
- 1× test tube stopper
- Small quantity of silver nitrate (test) solution, aqueous ammonia test solution

- 2 × Dropping pipettes, one for each test solution

**Please note that candidates must not be told the names of the compounds in the labelled containers.**

**REPORT FORM**  
**Republic of Namibia**  
**NAMIBIA SENIOR SECONDARY CERTIFICATE**

**PHYSICAL SCIENCE HIGHER LEVEL**

**8322/3**

PAPER 3 Practical Test

Question Paper & Examination Security Declaration

Region.....Date.....

Centre Number.....Centre Name.....

Principal (full name, print).....

Head of Examination Centre (full name, print).....

Hereby it is certified that this examination was conducted under appropriate measures and conditions as stipulated in the 'Rules & Regulations for the NSSC Examinations'.

Attached are the following details;

**1 Subjects Teacher's Results**

*Please submit details of the readings obtained in **Question 1** and **Question 2** on a spare copy of the question paper clearly marked '**Subject Teacher's Results**' and showing the Centre Number.*

*It is essential that each packet of candidates' scripts contains a copy of the applicable '**Subject Teacher's Results**' as the candidates' work cannot be assessed accurately without such information.*

**2 The Candidate Numbers of candidates attending each session were:**

*Please write them in their sitting order.*

First Session	Second Session	Third Session





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