

NAMIBIA SENIOR SECONDARY CERTIFICATE

BIOLOGY ADVANCED SUBSIDIARY LEVEL

8223/3

PAPER 3 Advanced Practical Skills

2022

INSTRUCTIONS TO SUBJECT TEACHERS

(For preparation of laboratories)

ADVANCED SUBSIDIARY LEVEL

This document consists of 4 printed pages.



Republic of Namibia

MINISTRY OF EDUCATION, ARTS AND CULTURE

Instruction to teachers

The following fresh materials need to be **obtained in good** time before the practical examination to provide accurate results:

- 0.5 g of yeast per candidate. One 10 g sachet is sufficient for exactly 20 candidates (buy fresh to ensure that the yeast is active/before expiry date).
- Test the distilled water with Universal Indicator to ensure that the pH is close to 7.0.

Teachers should ensure that they can provide learners with warm water of 45°C – 50°C for a water-bath.

Material for Question 2

Material	quantity	✓
250 cm ³ beaker labelled " water-bath "	1	
250 cm ³ beaker labelled " distilled water " and filled with 100 cm ³ distilled water	1	
400 cm ³ beaker labelled " for washing " filled with 400 cm ³ of tap water	1	
Test-tube (150 × 20 mm)	6	
Six-hole test-tube rack	1	
Dropper bottle filled with 5 cm ³ of Universal Indicator solution labelled ' Universal Indicator solution '	1	
Marker pen	1	
Glass stirring rod (label 5 stirring rods A - E and one non-labelled stirring rod) Label glass stirring rod with self-adhesive labels 10 × 20 mm or not larger than 16 × 32 mm.	6	
50 cm ³ beaker filled with 30 cm ³ of glucose solution labelled " beaker 1 – glucose solution "	1	
Empty 50 cm ³ beakers labelled " beaker 2, beaker 3, beaker 4 and beaker 5 "	4	
50 cm ³ beaker labelled " yeast " containing 0.5 g of yeast	1	
Stopwatch	1	
5 cm ³ syringe	2	
10 cm ³ syringe	2	
Tripod stand with a wire gauze to hold and support the water-bath	1	
Thermometer ranging from 0 – 100°C	1	

Preparation of glucose solution

Dissolve 10 g of glucose in 100 cm³ of distilled water. 100 cm³ of glucose solution is sufficient for 3 candidates.

Material for Question 2

Material	quantity	✓
Pre-prepared microscope slide of a transverse section of a dicotyledonous leaf	1	
Access to a light microscope with an eyepiece graticule and stage micrometer slide (with scale division of 0.1 mm)		

REPORT FORM
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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 Subject 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



3 The supervisor is required to give details of any difficulties experienced by particular candidates, giving Candidates’ Names and Numbers. This should include any reference to:

- any general difficulties encountered in making preparation
- difficulties due to faulty apparatus or materials
- accident to apparatus or materials
- assistance with respect to colour-blindness

Other cases of hardship, e.g. illness, temporary disability, should be reported directly to DNEA through the regional offices on the normal ‘ Application for Special Consideration’ form.

Report on any difficulties experienced by candidates.

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Principal’s Signature & Date

Head of Examination Centre’s Signature & Date:.....

Subject Teacher’s Full Name:

Subject Teacher’s Signature & Date:

Invigilator/Supervisor’s Signature & Date: