

Centre Number	Candidate Number	Candidate Name
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NAMIBIA SENIOR SECONDARY CERTIFICATE

MOTOR MECHANICS ORDINARY LEVEL

6189/2

PAPER 2 PRACTICAL EXAMINATION

3 hours

Marks 50

2022

Additional Materials: As listed in Instructions to subject teachers.

INSTRUCTIONS AND INFORMATION TO CANDIDATES

- Write your Centre Number, Candidate Number and Name in the spaces at the top of this page and on all separate answer sheets used.
- Write in dark blue or black pen.
- You may use a soft pencil for any rough work, diagrams or graphs.
- You may use a non-programmable calculator.
- Do not use correction fluids.
- Do not write in the margin *For Examiner's Use*.
- You may use blank pages for working drawings or when answers are crossed out and corrected.
- The number of marks is given in brackets [] at the end of each question or part question

For Examiner's Use	
Part A	
Part B	
Part C	
Total	

Marker	
Checker	

This document consists of 8 printed pages.



Republic of Namibia
MINISTRY OF EDUCATION, ARTS AND CULTURE

INSTRUCTIONS AND INFORMATION TO CANDIDATES**Part A**

- Answer **all** the questions.
- Write your answer in the spaces provided on the Question Paper.

Part B

- Candidates will wear approved Personal Protective Equipment (PPE) for the duration of the test.
- The use of cell phones are strictly prohibited.
- The test may be terminated by the invigilator if candidate demonstrates a lack of competency that may result in physical injury or mechanical damage.
- Candidate will clean work area, tools and equipment after completion of tasks
- Candidate will return tools and equipment after use.

Part C

- Number of sets of tools and machines
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

2 List all the tools you will need to carry out these measurements.

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[5]

[20]

Part B: RealisationTotal time for completing Part B will be 2 hours.**1 Cylinder Bore Measurement**

Measuring point	1	2	3	4
X – axis				
Y – axis				

[13]

2 Piston Diameter Measurement

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.....mm

[5]

3 Piston to cylinder wall clearance

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[2]

[20]

Part C: Reflection/Review

1 State the usability of the replacement piston with regard to the measurements obtained, and compared to the manufacturer's specifications.

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[2]

2 Discuss the effect the difference of measurements in the cylinder will have on the performance of the engine.

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[2]

3 Give a reason for the answer in question 2 above.

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[4]

4 Make a recommendation based on your findings on how to maintain good engine performance.

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[2]

[10]

SPECIFICATION REFERENCE SHEET

Engine Type: Mercedes Benz M270 (A- 160)

Engine bore diameter: 83.0 mm (Standard size)

Piston to wall clearance: 0.008 mm – 0.013 mm (Standard size)

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