



**ASSESSMENT AND EXAMINATIONS DIRECTORATE**

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REPUBLIC OF SOUTH AFRICA, Website: [www.ecdoe.gov.za](http://www.ecdoe.gov.za)

## **NSC 2015 CHIEF MARKER'S REPORT**

<b>SUBJECT</b>	MECHANICAL TECHNOLOGY
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<b>PAPER</b>	1
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<b>DATE OF EXAMINATION:</b>	26 NOVEMBER 2015	<b>DURATION:</b>	<b>3 HOURS</b>
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This section of the instrument is aimed at providing valuable feedback to schools, subject advisors, teachers and learners about common errors committed by candidates in the answering of questions, to assist teachers and subject advisors to identify areas that need to be given special attention in the teaching and learning of the subject in 2016.

Your responses will be based on two parts:

**Section 1:** General overview of Learner performance in the question paper as a whole

**Section 2:** Comment on candidates' performance on individual questions (Detailed explanations must be provided **per question** as follows: (You may include sub questions where necessary))

- General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?
- Why the question was poorly answered?
- Provide suggestion for improvement in relation to teaching and learning
- Describe any other specific observations relating to responses of learners
- Any other comments useful to teachers, subject advisors, teacher development

## SECTION 1: (General overview of Learner Performance in the question paper as a whole)

### Question 1

This question was answered fairly well, although it could also be a guessing game.

### Question 2

Personal safety is never being answered specifically, but generally – Learners need to be specific on the safety aspects of the various equipment used in the workshop.

### Question 3

Although the functions of the various testers are outlined in our textbooks, the learner responses to these questions were not answered satisfactorily.

Although the gas analyser has been in past question papers, most of the learners still could not give reasons for the high CO readings.

### Question 4

This question was a night mare to most of the learners. The diagram in the textbook is most confusing, but the memo gives a good description and layout of the various structures and their positions.

### Question 5

This question should not have been in the paper and is not Caps compliant.

### Question 6

This question was poorly answered, because of all the possible answers not given in the memo.

### Question 7

The calculations are still a cause for concern with regard to the system of forces, whereby the learners often confuse themselves with the trigonometry identities and the angles concerned. Question 7.4 was a brain teaser. Most of the learners got it wrong, but if they applied the theory of moments about a turning point it could have helped.

### Question 8

This question was a higher order question and the learners had to think very carefully, hence the poor answers.

### Question 9

This question was answered very well.



Question 10
It is the last chapter in the syllabus-
Confusion about superchargers and turbochargers.
Many learners applied the steam and gas turbine applications to their motor vehicle engines.
The overall learner performance of the question paper demonstrate no understanding of most of the content of the subject.
Inadequate preparation by the educator or the learner could be the reason for this performance.
Learners have difficulties understanding the various terminologies and often confuse them with direct translations, just to give an answer to the question.
From the learner responses it is evident that the content was covered but they were ill prepared for this examination.

## SECTION 2: Comment on candidates' performance in individual questions

(It is expected that a comment will be provided for each question on a separate sheet).

<b>QUESTION 1</b>
<b>(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?</b>
Question 5 is questionable with regard to the policy document.
Although not explicitly covered by our policy document the question was well answered, thanks to the formula sheet.
Question 7 is ambiguous in the sense that we ask the learner to calculate the resultant of the horizontal and vertical components.
The word resultant should be removed.
Question 7.4 had the learners confused because of the position of the support on the left end. Most of the learners got this calculation wrong.







