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**NSC 2016 CHIEF MARKER'S REPORT**

<b>SUBJECT</b>	CAT		
<b>PAPER</b>	P1		
<b>DATE OF EXAMINATION:</b>	19 October 2016	<b>DURATION:</b>	3 hours

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

**REPORT FORMAT**

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

**Figure 1:** The above graph is a reflection of a sample of **46% weak, 34% average and 20% good** performing learners

**Figure 2:** The general achievement of learners according to Applications examined.

- The paper was of a **very high standard**.
- In general the majority of the Eastern Cape learners did not perform well in this question paper.
- Many did not complete the paper or left questions out (reflected in the graph above).
- Many learners lack reading and comprehension skills and can therefore not determine what is required from them.
- Many learners lack the skills and knowledge required to answer even the easy questions.

**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>
(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

The majority of the learners attempted this question and did fairly well.

- Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

**The following areas were problematic for learners:**

#### Question 1.1.4

- Most learners did not know who to change the vertical alignment of the page.

#### Question 1.3

- This question was poorly answered by the learners, they did not know how to update an existing table of content or how to set it to 4 levels. If a screenshot of the TOC was included in the question paper the learners would have done better.

#### Question 1.5 (This question was difficult to interpret for most learners)

- Learners did not know how to change the colour to ONE SHADE LIGHTER.
- 90% of learners could not change the column border as indicated on the screenshot on the question paper.
- Some learners did not know how to insert a formula in a table. They did not realise they had to change the formatting of the formula (commas). They made use of the default.
- The instruction stated "tons" must be sorted descending according to production. Most of them sorted according to the second column (metals).

#### Question 1.6 (Most learners lost this mark)

- The learners did not understand the terminology and did not know who to change the existing index.

**Demand for Precious Metals** XE "Precious Metals silver" XE "Precious Metals gold" XE

#### Question 1.8 (Most learners lost these 4 marks)

- Extremely difficult question for the learners, they had to do 2 replacements
- Learners had to replace the "block" symbol displayed as , in order to do this they had to find and replace the font.
- 95% of the learners did not understand what they were suppose to do and received

maximum 1 of the 4 marks.

**INDEX**

<b>C</b>	
connectivity markets	3
<b>P</b>	
political instability	4
political uncertainty	4
<b>Product classes</b>	
agro	3
other	3
<b>R</b>	
rate	4
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terrorism	4

## Question 1.9

The question stated that they had to change the numbering and that it must be exactly the same as on the question paper. They concentrated on changing the alignment of the numbering and not the alignment of the text.

- |   |
|---|
| <ul style="list-style-type: none"> <li>• Provide suggestions for improvement in relation to Teaching and Learning</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Learners must work through previous years papers as             <ul style="list-style-type: none"> <li>• the same type of questions are often asked and</li> <li>• learners need to be familiarized with the way questions are asked.</li> </ul> </li> <li>• Work out of different text books.</li> <li>• Encourage learners to explore all possible alternatives (go beyond the syllabus).</li> <li>• Educators must ensure that they give learners a clear indication of what is “always” asked in the final paper.</li> </ul> |

(d) Describe any other specific observations relating to responses of learners

- Compared to 2015, learners achieved lower results in this year's Word questions.
- It is the first question and most learners therefore attempted the question.
- Traditionally Word is the application that most learners achieve their best marks in, and the same applies to this paper. This is the question with the best average results.

(e) Any other comments useful to teachers, subject advisors, teacher development etc.

The following aspects should be implemented in teacher training by subject advisors:  
Subject Advisors must be **experts in the field** and must visit schools where there were problems with writing data onto CD's and where the results were below average.

Use the following **as workshop topics** to cover content gaps (invite experts to do the training):

- Show learners how to change between footnotes and endnotes.
- Tables:
  - Using functions in calculations in tables and formatting these functions
  - Formatting rows and columns in a table and sorting the columns
- Hyperlinks to different areas in a document e.g. Bookmarks or Headings

**SECTION 2: Comment on learners' performance in individual questions**

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

**QUESTION 2**

(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

- Learners performed better in this question than in 2015.
- Learners spend a lot of their time on this question.

- Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

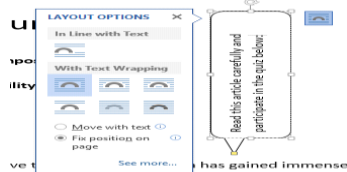
The following areas were problematic for learners:

**Question 2.1 (Most learners achieved the 4 marks)**

- Watermark: Instruction states that learner must insert image as a watermark with certain

attributes. BUT some learners inserted image as a picture behind text.

- Question was to test inserting as a watermark and not pictures behind text.
- Fairly easy question that most learners could do.



### Question 2.3

- Some learners are not able to **change** the existing text box to the required callout shape, so they **inserted** a callout shape.
- We can only assume they did not know where to edit the shape and how to apply text direction so they rotated the shape.



### Question 2.4

- Most learners knew how to caption, but not how to add a new label.

### Question 2.5

- Question instruction reads: "Ensure that the word 'Quiz' will always appear at the top of a new page."
- Most learners interpret that the word 'Quiz' must be at the top of every new page and placed it in the header.
- Most could do the form fields.
- Learners do not know how to distinguish between a form field and a content control field.

Table of Figures

TOC \n \h \z \c "Picture" \d

### Question 2.6

- The Table of figures were a new term for many learners as they could not do this.

- Provide suggestions for improvement in relation to Teaching and Learning

**The following easy questions were poorly answered: (Educators need to emphasize the following:**

- o The difference between inserting **watermark** and inserting a **picture**
- o The difference between **text box** and **callout shapes**
- o Editing the properties of form fields
- o Adding page borders to a section

Schools must ensure that the lab is available after hours for learners who do not have computers at home to do homework and for additional work.

At least 3 past question papers or more should be done before the final examination. Questions that are often repeated must be drilled e.g. the use of Breaks, Developer Tab skills and Reference Tab skills.

(d) Describe any other specific observations relating to responses of learners

In some centres learners did very well in this question and in other centres the results are extremely weak.

(e) Any other comments useful to teachers, subject advisors, teacher development etc.

Subject Advisors must be experts in CAT.

- Weak performing schools must be visited and educators must explain why learners perform so weak. If the educator is not competent they must be trained by the subject advisors.
- Workshop should be given to cover content gaps (invite experts to do the training).

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

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

### QUESTION 3: Spreadsheet - Excel

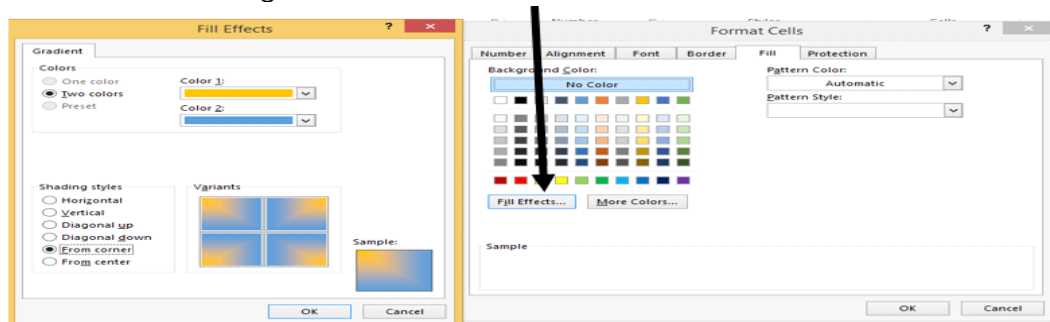
(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

Question 3 was poorly answered by most learners.

The questions where mathematical calculations were required were often left out.

- Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

**Question 3.2:** In general well answered. Many could however not apply the third instruction to add a gradient fill to the cells.



**Question 3.5:** Learners were confused with the instructions.

B	C	D	E
ply and Demand '000 ounces			
nbod en Aanvraag '000 onse			
2014	2015	2016	Toename/Afname
4205	3546	4237	$= (D3-B3)/B3*100$

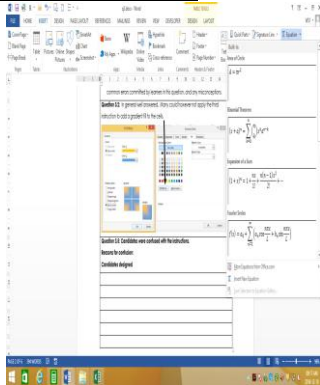
Correct

response should be:  $= (D3-B3)/B3*100$

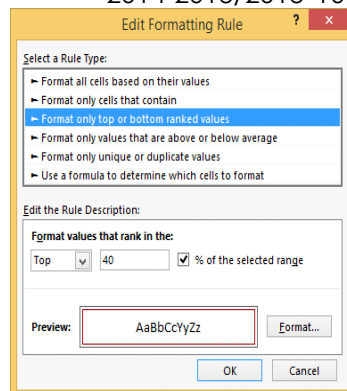
### Instruction:

$$\frac{\text{Figure for later year} - \text{figure for earlier year}}{\text{Figure for earlier year}} \times 100$$

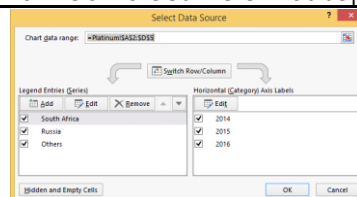
### Reasons for confusion:



- Learners designed built in equations instead of using cell reference and a formula to solve the problem.
- Learners misinterpreted the question and used the incorrect cell references. The wording "Later year and earlier year" created confusion.
- Learners do not know when to use brackets in a calculation.
- Learners do not know how to calculate a percentage. They multiply by 100 and then also select the percentage number format.
- Learners used typed out numbers instead of cell referencing in the spreadsheet e.g. 2014-2013/2013\*100



**Question 3.6:** this question was answered poorly as many learners do not know how to apply different conditional formatting features. The "Top or bottom ranked values" rule was supposed to be used.



**Question 3.7:** this question was answered well in general. Components of the question that were problematic were:

- Editing the axis labels to years

- Adding a stack fill to the data series
- The **3d stacked bar** chart is not commonly used and the stacked affect may have contributed to some confusion

**Question 3.8:** this was the most challenging question for the learners. Many learners did not comprehend what must be done.

Reasons for incorrect interpretation:

- Many did not understand that the Maximum is 5 stars
- Many only added a formula as instructed at the end of the question and for this question they needed to make use of functions as well
- Many cannot combine functions in a cell

B	C	D
Weight in grams Gewig in gram	Number of Stars Getal Sterre	Stars displayed Sterre vertoon
1650	3	***
1778	3	***
1426	2	**
2456	4	****
1360	2	**
868	1	*
1300	=B10/550	=LEFT(B1;INT(C10))

- Many learners do not know the (TRUNC, INT, ROUNDDOWN) functions well enough to apply them in problem solving questions

- Provide suggestions for improvement in relation to Teaching and Learning

**Topics that need attention:**

- Adding a gradient fill to cells
- Accuracy with selecting ranges (not including headings etc.)
- The difference between a function and a formula
- The use of the % number format and the x100
- Adding and removing comments in a spreadsheet
- Spend more time in teaching the different rules of Conditional Formatting
- Graphs:
  - Different fill options including the stacked effect
  - Working with different types of graphs especially the stacked graph types
  - Editing the data ranges of a graph

**General:**

- Revision of Grade 10 and 11 work must be done throughout the Grade 12 year
- The Grade 10 and 11 functions must be thoroughly taught as to establish a good grounding for grade 12.
- Remind learners to read the whole question first and show them how to find the important instructions that need to be addressed
- When instructed to add specific images learners must read and follow instructions. Many randomly insert any image and lose unnecessary marks for this.

(d) Describe any other specific observations relating to responses of learners

- In general learners do not attempt the spreadsheet questions as it requires mathematical skills and many are not well vested in mathematics as a subject. The use of decision making IF statements are extremely difficult for learners who have not mastered analytical thinking skills.
- Some learners did calculations using the calculator and typing the answers in. This shows a lack of spreadsheet skills and 0 marks were given in these cases.
- Some learners combined functions and formulas e.g. =sum (B3+B4+B5) resulting in 0 marks for the question.

(e) Any other comments useful to teachers, subject advisors, teacher development etc.

- Educators need to put more effort in Spreadsheet functions and should use the latest versions of programs.
- Subject advisors must ensure that Educators are competent to teach spreadsheet functions as a lack of skills and knowledge by the educator will have a direct impact on learner's ability to apply the functions.
- Educators should attend courses every time a new version is on the market to keep them up to date with the fast changing technology.
- Competent educators could mentor schools that do not perform well. These underperforming educators could attend lessons by educators who have good performing learners.
- Revision of past papers curtail in order to see how the functions and formulas must be applied.

#### QUESTION 4: Spreadsheet – Excel

(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

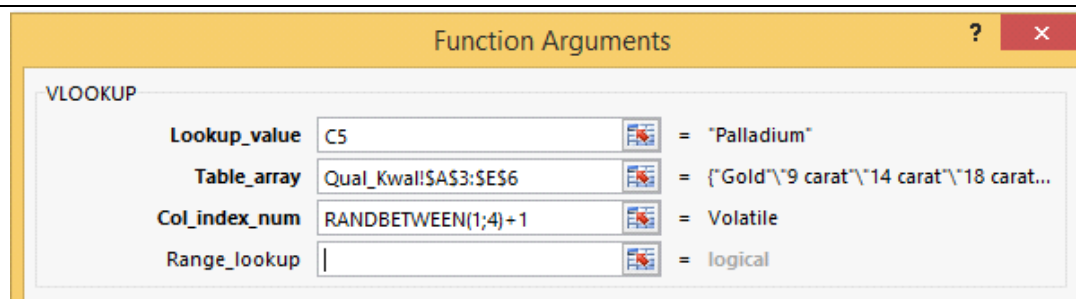
Question 4 was poorly answered or left out by many learners. The average for this question is also extremely low in relation to the other questions in this examination.

- Learners form a relatively small number of centres managed to answer this question well.
- Most of the excel question depend on the learners ability to READ and COMPREHEND and ANALYSE the data and instructions in order to decide what functions must be used to solve the problem.
- Only 6 of the 25 marks (76%) were allocated to questions that did not require a combination of functions and higher order thinking skills.
- Data retrieved: the cell used to write the formula/function in contributes to confusion as when it is pulled down the top cell will not be filled in.

- Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

**Question 4.2:** (combination of text functions)

- Many learners cannot combine functions and cannot make use of building blocks to solve problems.
- If learners are confident in using text functions this question should not have been a problem for most of them.



**Question**

**4.3:** (combination of lookup and random numbers and referencing to different worksheets) - (higher order thinking question)

- The data confused the learners as it is not related to a real life situation.



- The phrasing of the question also contributed to confusion. In a 3 hour paper where learners have restricted time to read and comprehend many either wasted time on this question or eventually left it out as they were not sure what had to be done.
- Two of the most difficult excel concepts were tested in this question.
- Randbetween is seldom used in practice and learners do not understand the reasoning behind the use of this function. The addition of 1 to **ensure that the number is larger than 1 and maximum 5** is also a difficult concept to comprehend.

**Question 4.4:** (combination of functions) - (higher order thinking question)

- This is a challenging question.
- Learners have to combine two fairly unrelated criteria and do not understand the logic behind it.
- This question was poorly answered and most learners did not attempt it.
- Time constraints with the practical paper also contributes to learners not attempting the question when they read it and are not sure what must be done.
- This is a question that required mathematical and logical skills.

C	D	E	F	G	H
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### Jewellery Collection

### Juweelversameling

Precious Metal Edelmetaal	Question 4.3 Vraag 4.3	Grams Gramme	Question 4.4 Vraag 4.4	Unit price per gram Eenheid prys per gram	Stone Type Steentipe
Silver	925	24	*	800	Ruby
Palladium	950	12		500	Diamonds

- There are various solutions to produce the final expected outcome.

Correct answer: =if(C4="Silver",if(H4<>"","\*",""),"")

(There should be a star in cell F4 if Column C4 is Silver and there is data in H4 BUT if there is no data in H4 there must be no star)

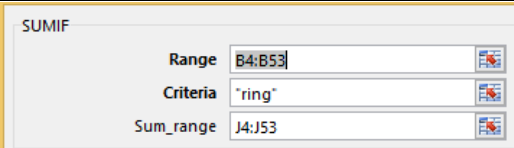
**Break the function down in the following elements:**

=IF(criteria, true, false) OR =if (C4="Silver",if(H4<>"","\*",""),"")

- The criteria is: C4="Silver"
- The false is: "" indicated at the end
- The true part of the IF statement is represented by a second IF statement:
  - if(H4<>"","\*", "")
- The last mark is given for copying the function to the rest of the cells below

**Question 4.5:** Sumif or Sumifs function

- Many learners do not know that you cannot include 2 criteria in a Sumifs function in the same range. Here you have to make use of wildcards e.g. "\*ring\*"
- If 2 different criteria is required for a range the wildcard must be used or alternatively the Sumif function must be used twice and added together.
  - =SUMIF(B4:B53;"ring";J4:J53)+SUMIF(B4:B53;"Earrings";J4:J53)
  - Typical errors:
    - Typing errors e.g. rings



- Range errors – extending or not including cells
- Sum\_range and Range not in correct position

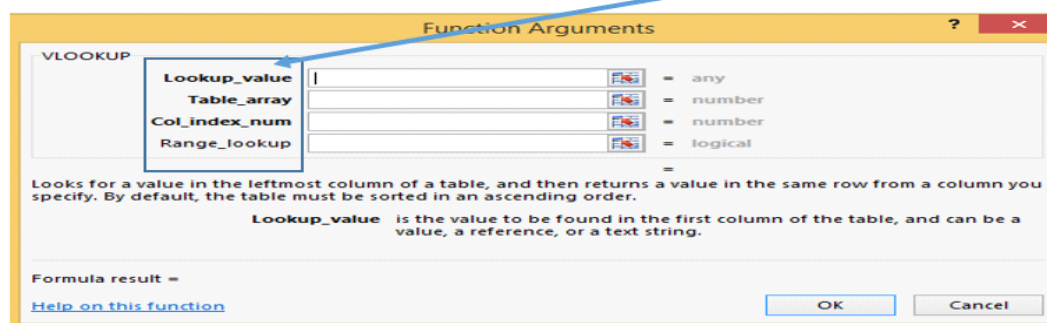
(c) Provide suggestions for improvement in relation to Teaching and Learning

**General:**

- Advise learners who find Mathematical calculations difficult to do spreadsheet questions last. Many spend too much time on these questions and then give up on them as they are not able to understand what is required of them.
- Show weaker learners how to make use of building blocks in order to solve questions where a combination of functions are required.

**Topics that need attention:**

- Text functions
- All if combinations: (sumif, sumifs, countif, if, nested if etc.)



- Vlookup – make use of the insert function tool. Teach learners how to read the help messages and what the different areas represent. e.g. **Table\_array**
- All variations of the **if statement** combined with sum, count etc.
- Learners do not know the use of the wildcard character, (\*).
- Teach CAT in English and make sure learners work through past papers.

(d) Describe any other specific observations relating to responses of learners

- Learners use cell referencing instead of typed out criteria in functions
- Learners often spell/type criteria incorrect
- Learners are not able to analyse the question and focus on what is essentially asked this could possibly be as a result of inefficient language skills by all learners.

(e) Any other comments useful to teachers, subject advisors, teacher development etc.

- The textbooks used are limited in preparing learners for the final examination.
- Draw up lists of functions – make sure educators are confident in using them.
- Have workshops where educators work through past papers and ask experienced teachers who have been markers in the region to assist with analysing the marking guidelines. Let the teachers do the examinations and then mark themselves with the marking guideline.

### QUESTION 5: Database - Access

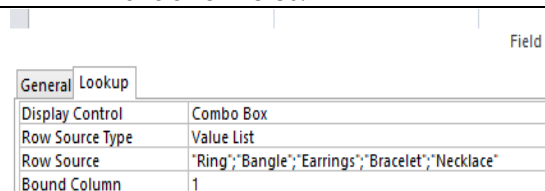
- (a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

The previous questions asked were extremely difficult and more than 30% of this question was also higher order thinking questions.  
Time constraints lead to learners not answering questions that were deemed difficult.

- Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

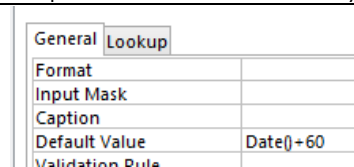
#### Question 5.1.3: Validation Rule and Required field

- The last bullet in this question should have guided the learners to use a validation rule
- Learners find validation rules difficult because of its mathematical nature. Learners are not always sure when to use  $\geq$  and other mathematical operators.
- Learners must be taught to copy text from the question paper and use this as validation text.
- Learners are confused with the use of (AND, OR, BETWEEN and quotation marks) in validation rules.



**Question 5.1.4:** Value list – this was not a difficult question – Learners who battle with this question were not adequately prepared for the examination.

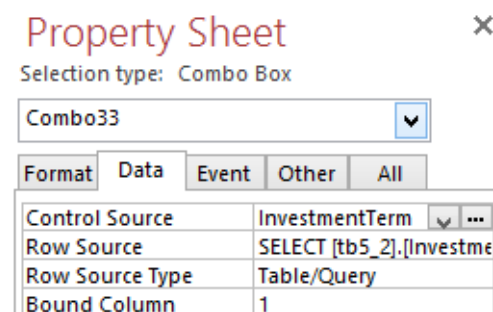
**Question 5.1.5:** Input mask – usually a difficult question for learners. The learners were however given an Addendum with the list of input mask codes for the first time. This helped them tremendously. The examples given may have confused some of them.



**Question 5.1.6:** Learners found this question very difficult. Functions are not commonly used in the field properties of the database.

#### Question 5.2:

**Label:** Learners add their exam number in a text box and not a label. They need to know the difference between a label and a text box and that text is usually typed in a label and not a text box.

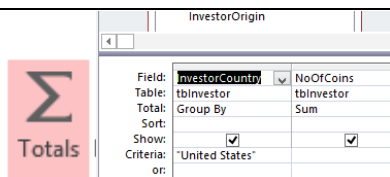


The question could have led to confusion as exam

numbers in headers of documents are often asked but no marks are usually allocated to this.

**Combo box:** linking to another field is not commonly covered therefore many could not do this question.

Learners must be taught that the field should not say unbound when viewed in the design view. The Control Source must be set to link the combo box.



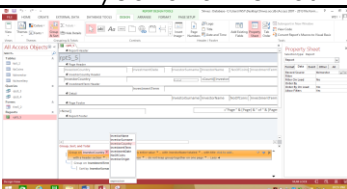
### Question 5.3: Query

Learners do not know how to use the total function in queries. Similar questions have been asked in the past. Learners have to work through old papers. Many did not attempt this question.

Field:	InvestorName	InvestorSurname	InvestmentDate	CheckMatch: [InvestorCountry]=[InvestorOrigin]
Table:	tblInvestor	tblInvestor	tblInvestor	
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:			Between #1975-01-01# And #1989-12-31#	
or:				

### Question 5.4: Query

- The calculated field was unusual and many did not know what outcome to expect.
- Working with dates are usually difficult for learners as the order of day, month and year and the hashtags can contribute to their confusion.



### Question 5.5 Report

Replacements of groupings were problematic.

Learners find it difficult to add formulas in textboxes in different areas of the report.

(d) Describe any other specific observations relating to responses of learners

- Learners did not have time to go back to aspects they found difficult to solve, as a result large sections were left out.
- Learners sometimes lost marks because they were careless. E.g. the field size

(e) Any other comments useful to teachers, subject advisors, teacher development etc.

- Emphasise aspects that are traditionally problematic in Access and make sure educators are capable to teach the following:
  - Input masks
  - Validation rules
  - Combo boxes – and linking them
  - Grouping and sorting and editing the report
  - Calculated queries

- Calculations in various parts of the report
- Workshops for teachers are essential especially in schools not performing well.

## 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 6: Web design - HTML</b>
(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?
Many learners did not attempt this question or spent the minimum time on it because of time constraint. Learners do not manage their time effectively throughout the paper.

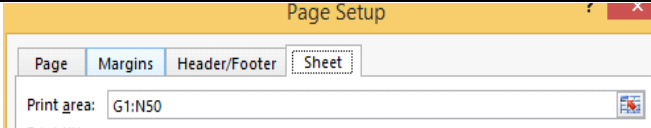
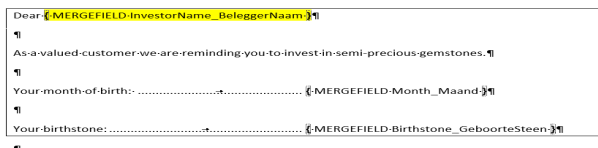
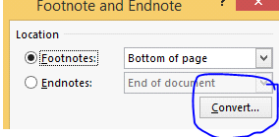
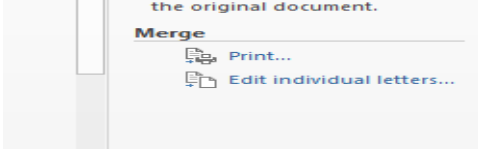
(b) Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.
In general the results for the sample group are better for this question than most of the other applications. It is only Word Processing that has a higher average.
<pre>&lt;!--6.3--&gt; &lt;body background="6Rh.jpg"&gt;</pre> <p><b>Question 6.3:</b> HTML image as a background watermark – is something new to the learners and have not been tested before.</p>
<pre>&lt;!--6.8--&gt; &lt;table align="center" border="3" cellspacing="10"&gt;   &lt;tr&gt; &lt;td colspan="3"&gt;Rhodium Prices&lt;/td&gt; &lt;/tr&gt;</pre> <p><b>Question 6.8:</b> Colspan and Cellspacing – this is work generally done only in grade 12. Practice this and use it in the PAT to reinforce the skill.</p>
<ul style="list-style-type: none"> <li>• Provide suggestions for improvement in relation to Teaching and Learning</li> </ul>
<ul style="list-style-type: none"> <li>• Advise learners to answer this question before the spreadsheet question if they find excel difficult.</li> <li>• Learners <b>who answered this question in Word were</b> not awarded any marks.</li> </ul>
(e) Describe any other specific observations relating to responses of learners
<ul style="list-style-type: none"> <li>• HTML is one of the sections that learners enjoy in general. It is not too difficult to obtain marks in this section.</li> </ul>
(e) Any other comments useful to teachers, subject advisors, teacher development etc.
Advise teachers to work in Notepad ++ when teaching HTML Teachers must know more that the basic CAPS requirements (must be confident in using HTML) so that they can show learners how to set different backgrounds etc.

## 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 7: Integration</b>
(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?
The majority of the learners did not attempt this question as there were many different documents to open and it was a time consuming question for only 20 marks.

(b) Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.
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	<p><b>Question 7.1.1 &amp; 7.1.2:</b> These were not difficult questions but learners are not used to printing and setting a print area is something they have not done often.</p>
	<p><b>Question 7.3.4:</b> (tab setting)</p> <p>Similar questions are often asked. Learners must be able to manipulate tab settings.</p>
	<p><b>Question 7.3.2:</b> Converting an endnote to a footnote: Most learners created a footnote and deleted the endnote instead of converting it.</p>
	<p><b>Question 7.3.6:</b> Mail Merge – this has often been asked in past papers. Use the Mail merge wizard to complete this question and after saving in <b>step 6</b> learners must click on edit individual letters and save the final merge.</p>
<p><b>Question 7.4.1 &amp; 7.4.2 &amp; 7.4.3:</b> These questions were very poorly answered. They require the learner to use problem solving skills to answer the question given. Many actions have to be taken in order for 2 marks.</p> <p>There were learners who worked out the answers in the documents provided but then wrote out a long explanation on the answer sheet instead of giving only the answer.</p>	

<ul style="list-style-type: none"> <li>• Provide suggestions for improvement in relation to Teaching and Learning             <ul style="list-style-type: none"> <li>• Enter CAT learners into the Applications Olympiad – this will assist with preparing them for question 7 of the CAT P1.</li> <li>• Work through past papers not only for revision but also for teaching as this will assist learners in getting used to the structure of the question paper.</li> <li>• Teach learners to use problem solving methods like (sorting/filtering)</li> <li>• Explain to learners how to work step by step to solve problems</li> </ul> </li> </ul>
<p>(d) Describe any other specific observations relating to responses of learners</p> <ul style="list-style-type: none"> <li>• Question 7 was not answered well as a whole.</li> <li>• When looking at the data it is evident that some learners knew what to do but did not have the skills to express themselves on the answer sheet.</li> </ul>
<p>(e) Any other comments useful to teachers, subject advisors, teacher development etc.</p> <ul style="list-style-type: none"> <li>• Use past papers in Teacher training courses</li> <li>• Use experienced markers to help train other teachers by working though past papers in training sessions.</li> </ul>

## SECTION 2: C

## REPORT 2: EVALUATION OF THE QUESTION PAPER AND MARKING GUIDELINE

### 1. STANDARD OF THE QUESTION PAPER

Was the paper of an appropriate standard for Grade 12? Substantiate using the following headings:

#### • Compliance to CAPS and Examination Guidelines

The standard of Paper 1 for Computer Application Technology was very high and within compliance of the guideline of the CAPS document.

- The total mark allocation of the paper (180 marks)
  - and the distribution of marks amongst the Applications taught in CAT
  - as well as the **time provided** for the paper (3 hours) was according to the CAPS guidelines.

#### • Cognitive skills assessed

Was there an appropriate distribution of questions in terms of low, middle and higher order cognitive skills? (If No Please attach a weighting grid to show the distribution of the cognitive skills assessed)

Were choice questions assessing similar cognitive skills?

Yes

The distribution of questions was appropriate, the high order questions tend to be very difficult, especially in the spreadsheet and database sections, therefore the marks for spreadsheets and dabata are lower than the other questions.

No choice questions for CAT P1.

### (c) Difficulty level of question paper

In general do you think the paper was difficult, fair or easy? Please provide examples with reasons.

Were choice questions of equal level of difficulty?

- The paper was of a good standard and **fair to difficult** in some sections.
- The spread of difficult questions was well planned and the Top academic learners got excellent marks for this paper e.g. 174/180.
- The marking guideline was amended at the marking guideline discussion at National level to accommodate all possible outcomes.

- The **lower % of learners with level 7** indicates that the paper was more difficult for learners and that the high order level question played a part in the decreasing of the marks.

- The **lower % of learners achieving a level 1** indicates that there were enough questions

at the various cognitive levels and that the structuring of the questions (in most cases) was fair to those learners with language barriers.

- As in past papers the difficult questions were spread throughout the different application packages. Learners should know that they must move on to the next question if they are not able to solve a particular problem. Most Learners waste time attempting to solve these difficult questions and then complain that the paper was too long as they were not able to complete the paper.

**(d) Coverage of prescribed Content and Skills**

Does the paper cover the Content and Skills as prescribed in the CAPS? If your answer is no, indicate which Content and Skills were not adequately covered?

All the requirements of the CAPS document were adequately covered and some of the higher order questions went beyond the CAPS document to offer challenges to stronger learners.

- This paper covers the prescribed Content and Skills that are expected for Grade 12 CAT P1 CAPS.
- When the entire assessment programme for CAT is considered all the Assessment Standards will be met.
  - School Based Assessment (25%)
  - PAT (25%)
  - November CAT P1 – (25%) - paper reported on in this document and
  - November CAT P2 (25%)

**2. FAIRNESS OF QUESTIONS**

Were there any questions that were unfair? List them and substantiate why each one was unfair.

**Question 4:**

To repeatedly penalise learners who used cell references as criteria in calculations seems unfair. Many learners lost at least 4 marks in question 4 for the same thing. Would it not be possible to subtract only once for a criteria indicated as a cell reference? (similar as we do in HTML) Educator often instruct learners to do so as this eliminates the possibility of making a spelling mistake.

**Data/Scenario**

**Question 4.3** is not related to a real life scenario. The question does not make sense as learners are expected to create a randomly generated number from 1 to 4. You would not randomly pick numbers when you are working with precious stones of different quality levels and pay the same for them irrespective of the quality. The use of the Randbetween in this combination with a VLookup creates the impression that it was forced into a scenario that does not make sense only in order to ask it.

**3. LANGUAGE**

Is the language used appropriate for Grade 12 learners? List questions that were linguistically complex and show how these questions can be re-phrased.

- The level of language used was of a high standard and easy to follow and understand. Instructions were clear in most cases and the data retrieved was clearly labeled and shaded to improve on the level of understanding.
- Spreadsheet questions required multiple actions. Learners who do not have the language skills find it very difficult to follow the instructions. The paper however cannot compensate for learners who do not understand the language at all.



**Language not clear on following questions:**

**Question 3.6** – Words like “gross demand” are unnecessary.

The question should have read: “Use a spreadsheet feature to apply any border to the top 40% of the values in cells B8:D11.”

**Question 3.5:**

The instructions are confusing. The last sentence should have read: “Use a formula in cell E3 to determine the difference in South Africa’s platinum supply between 2014 and 2016” many more would have achieved good results. The image provided contributed to confusion.

**4. LENGTH OF QUESTION PAPER**

Were learners able to complete the examination within the allocated time?

No, the weaker learners did not complete the question paper in the allocated time. Reason for this is that they try and find the correct function in the application programme OR they do not have the language skills to read and comprehend the instructions immediately.

The average and learners struggle to complete paper in time.

Time wasted on difficult scenarios and high order questions that they could not do.

**5. USE OF APPROPRIATE TEXTS**

Were the texts/ contexts used appropriately? Substantiate.

Asking questions that are based on a scenario has always been a challenge to many learners. It is also understandable that it is very difficult in CAT to find a suitable scenario within which examiners can touch on all the various topics in the syllabus.

The formulation of the questions was good. There were some that was unclear as mentioned.

**6. MARKING GUIDELINE**

Is the mark allocation for all questions appropriate? If no provide examples.

Does the marking guideline cater for all alternative responses?

If No please list all correct responses which were not included in the memo.

(indicate the question number and response)

- The mark allocation for **most** questions were appropriate and fair.
- The marking guideline caters for most of the responses received from learners. During the marking memo discussion in Pretoria the memo was discussed in detail and hashed out very well.
- A mistake on memo was identified by markers at marking centre as shown below:

**Question 3.8**

The example of the nested if was incomplete on the marking guideline. The section underlined was left out. If marked on the bullets at the bottom of the marking guideline for this question the candidate will get different marks to the one who looked at the example in the memo and gave full marks for the incorrect example:

=IF(B10/550>=5,"\*\*\*\*\*", IF(B10/550>=4,"\*\*\*\*\*", IF(B10/550>=3,"\*\*\*\*", IF(B10/550>=2,"\*\*\*", IF(B10/550>=1,"\*\*", " "))))

The last instruction in this question reads: “Insert a FORMULA in cell D10 to determine and display the number of stars for a broach with a weight of 1300 grams. “ The solution to this specific instruction could be: **=B10/550** as it will give a result of **2** and this is the number of stars needed. The instructions were not clear enough. Learners did not know if the solution should work for all the examples above as well. The rubric also contains errors if the examples given

must apply to all options above cell D10 as B1 used in the examples is **not absolute** referenced.

DOES THE MARKINGGUIDELINE CATER FOR ALL ALTERNATIVE RESPONSES?

- The marking guideline caters for alternative responses and in Excel additional notes indicated that learners could have used “building blocks” to answer questions and that cell references may differ depending on the candidate's response.

• **RECOMMENDATION**

The paper compares well with past papers. The paper is of a good standard and has a fair spread of higher and lower order questions catering for all cognitive levels. Learners who were adequately prepared would not be disadvantaged by this paper and could have achieved good results.

**The year mark of CAPS - CAT is compiled as follow:**

- 25% Internal Assessment – school based – POA,
- 25% Internal Assessment – school based – PAT,
- 25% External Assessment – Theory P2
- 25% External Assessment – Practical P1

The marking guideline document was amended during the National Marking Memo discussion in order to add all possible alternative responses.

There is no **constructive evidence** that learners were disadvantaged to any extent that warrants an adjustment of marks.

I suggest the Raw Marks therefore be accepted.

**PLEASE TAKE NOTE OF THE FOLLOWING GUIDELINE – ATTACHED TO THE REPORT EVERY YEAR:**

These additional IMPORTANT guidelines to **educators/principals** of schools that offer Computer Applications Technology as a subject **MUST** be adhered to.

We **supply these guidelines every year** and find that some Centres make the same repeated errors every year.

The following items have had an impact on the performance of some of the learners in CAT P1.

**MANAGEMENT OF FINAL EXAM DATA:**

- 1) **Educators** need to check each Candidate folder after burning them on to the CD – too many empty folders still appear or folders are left completely off the CD. Many school submitted Data folders for Learners that had the unedited original data OR shortcuts to files, as a result the learner will get 0 if the modified data cannot be retrieved in time.
- 2) In many of the **schools where the learners do not perform well** there were folders missing or incorrectly labelled. This is a **reflection on a CAT educator** that is not adequately equipped to teach CAT as he/she does not have the necessary file management skills to follow up on data copied to the CD.
- 3) **EXAMINATION NUMBERS:** Invigilators **MUST** make sure that the examination number on the data folder and the mark sheet correspond. **Please use only the EXAMINATION NUMBER** to label the folder for every individual candidate. There are still schools that use ID numbers or student names to label folders. It is not possible to complete the mark sheets for these schools as we do not know who these learners are on the mark sheet and Data verification becomes a difficult task.
- 4) CDs with Candidate data **MUST** have the **Centre name written on the CD** as many schools only write the School name on the CD and when these CDs arrive separate from the mark sheet it is very difficult to figure out to which centre the CD/data belongs to.
- 5) A **CD must accompany every mark sheet** with the data of the learners of that mark sheet on the CD. Many schools submit one CD and then there are no CDs with additional marksheets. This causes a tremendous administrative burden as mark sheets are not always grouped together when submitted for marking at the marking centres.
- 6) The mark sheets **MUST indicate if the candidate is absent or present**. Time is wasted following up on learners as there is no data on the CD for the candidate, but the candidate is not ticked present or absent. We cannot assume the candidate is automatically absent.
- 7) Copy **all the exam data onto the CD, and not just individual questions** done by the candidate, as some of the learners work may be omitted.
- 8) Additional problems experienced are where centres copy Open Source and Microsoft files to candidate folders. Some learners then work in both of the packages and this delays marking as all markers are not able to mark in Microsoft and Open Source. Only the version installed at the examination centres should be available for learners and copied to the CDs submitted.
- 9) Learners should only answer what is asked and not do additional things that do not count marks and that could make it difficult for the marker to find the correct answer. **Learners must not have 3 copies of the** same question on the Data CD as the markers will not always be sure which version to mark.