



EXAMINATIONS AND ASSESSMENT CHIEF DIRECTORATE

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2024 NSC CHIEF MARKER'S REPORT

SUBJECT	COMPUTER APPLICATIONS TECHNOLOGY					
QUESTION PAPER	2					
DURATION OF QUESTION PAPER	3 HOURS					
PROVINCE	EASTERN CAPE					
NAME OF THE INTERNAL MODERATOR	CA SCHREUDER					
NAME OF THE CHIEF MARKER	HNELL					
DATES OF MARKING	28 NOVEMBER – 10 DECEMBER 2024					
HEAD OF EXAMINATION:	MR E MABONA					

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

Computer Applications Technology is the study of the components of a computer system (such as hardware and software) and the use and application of practical techniques to solve everyday life problems. CAT helps students develop creative and logical reasoning skills. It is an important subject, which prepares students for the workplace. The 2024 Computer Application Technology Paper 2 attempted to offer something from across the CAT syllabi from Grade 10 to Grade 12. It represented a good balance between the "elementary" basic concepts, to the more demanding interpretation and application of practical knowledge. As per previous years, the two main issues that affect the most on learner performance in the Theory paper is the candidates' lack of competence to express their thoughts in words as well as to study Grade 10 and 11 content. The low literacy rate of our learners as well as the inability to read the questions thoroughly and express themselves is the uppermost aspect that teachers need to focus on. The CAT curriculum demands a vocabulary unique to the technical terms for the subject. Application of knowledge remains a major problem. Many educators as well as candidates rated the paper as fair and appropriate. CAT has evolved into a more analytical and technical subject and success in the subject is dependent on hard work, thorough preparation and dedication. It will also be to the advantage of the learners if they can receive both the English and Afrikaans versions of the paper.

Teachers do not spend enough teaching time on preparing learners for the theory paper and that learners do not study for CAT theory. Teachers and learners must realize that theory is just as an important component in the CAT syllabus and that it contributes the same weight in the overall mark for CAT.

Because the suggestions for improving teaching and learning (Section C) as well as the useful comments to teachers (Section E) are very much the same for all the different questions, I will discuss them generally at the beginning of the report and then just refer to it in the discussion of the different questions.

GENERAL COMMENTS ON IMPROVING THE TEACHING AND LEARNING OF CAT THEORY

- More time and effort should be spent on teaching theory by following the instructions in the CAPS document as well as the EXAM GUIDELINE. According to DBE teachers should ONLY make use of the CAPS document and EXAM GUIDELINES to teach from and are NOT supposed to be textbook bound. This is a huge problem because in the CAPS and exam guidelines the different terminologies are listed, without clear guidance on what the learners should study and thus resulting in curriculum overload. According to DBE, learners are supposed to study these terms in full meaning definitions, how it works, advantages, disadvantages, application of these terms in real life, examples, etc. As we all know, teachers only have so much time to teach already now teachers need to do research on all these different terms, which is an impossible situation. Teachers should ONLY explain the theory and make sure that learners understand what they are learning. Curriculum guidelines therefore should be detailed, giving teachers a specific scope of what to teach, just like in all the other subjects. The fact that the theory is so broad and that there are no clear, in detail guidelines kills our subject a subject that is supposed to teach skills and equip learners for the future.
- CAT is a very dynamic subject. Teachers must therefore make a concerted effort to keep up with this new technology and bring their learners into contact with new technologies on a regular basis. Teachers will be informed once a year on new technology that may be assessed in addition to the existing content of the CAPS syllabus. This will be added to the examination guideline document which will be released once a year. All new technologies should be made available as early as January.
- Learners can also be challenged to come and share new technologies. This can also be done as part of a homework or class activity. Encourage learners to browse for new technology on the Internet or find advertisements in local media. They can bring these to school where they can be discussed in class. Teachers can also make use of experts in the field of technology to come and explain and demonstrate some of the latest technologies to learners.
- DBE advised teachers to familiarize themselves with the content of the CAPS document as well as the EXAM GUIDELINES and what is required from these documents. However, there

are three approved textbooks available for CAT but according to DBE, teachers are not supposed to teach from any textbooks.

- It is necessary to give learners regular theory tests based on the format of examination papers. The results of these tests (learner's responses) should be discussed with them – not just be handed back. They should know why they lost marks.
- Although time is limited, teachers should try and work through some question papers of previous years. The memos of these papers should be discussed with learners to train them how to approach and answer a question paper as well as learning the content.
- Teachers should **teach learners to use the correct terminology and teach learners to write in full sentences** when answering questions. They should not be allowed to answer questions by using words such as *it, things, they ... etc.* Learners also do not read the instructions: the instructions clearly stated that answers such as 'cheaper', 'slower'/'faster', etc. will NOT be marked.
- Teachers should explain the meaning of the following terminology/concepts used in questioning: recommend, features, best suited, most likely, settings, criteria to consider, difference between examples and uses, difference between media/technology and medium, give specific examples of....
- WHERE A QUESTION REQUIRES A LEARNER TO LIST OR NAME ONLY THE FIRST NUMBER OF ANSWERS/FACTS REQUIRED WILL BE MARKED.
- Grade 10 and 11 content: Teachers are reminded that according to the CAPS syllabus, learners are assessed on all theory done from grade 10 12 in the final examination. Learners should therefore keep summaries of their gr 10 and 11 theory in notebooks. Throughout the grade 12 year, teachers should incorporate grade 10 and 11 knowledge in tests to prepare learners for the final examination.

NOTE TO SUBJECT ADVISORS:

- CAT is still a new and very dynamic subject. Many teachers do not have the training or support to
 continually provide quality education to learners. Subject advisors should play a more active role in
 assisting teachers in gaining the needed knowledge and expertise. Subject advisors should also make
 sure that all schools receive the new and updated examination guidelines as well as new terminology
 for the New Year and make sure they use these documents in their teaching. Short training courses
 presented by themselves or other specialist teachers can only benefit this valuable subject.
- There are also schools who do not have the necessary hardware, software and Internet access to offer this subject. We would also appeal to the department and subject advisors to play a supportive role in this regard especially in schools where there are trained teachers available.

MISTAKES MADE BY LEARNERS IN ANSWERING THE PAPER:

The following mistakes were experienced and we appeal to teachers to please discuss this with their learners.

- Learners giving one-word answers. It often happens that learners respond with only one word to a question to list advantages/disadvantages/ characteristics. It is impossible for markers to judge from that whether the learner knows the work. No marks will be awarded in such cases. Other learners again, write paragraphs instead of sentences often contradicting their answer. This must also be discouraged.
- Vague and generic answers. Some learners, when they do not really know the answer, often fall back on vague and generic answers such as "it is easier and faster" and terms like "things" and "stuff" etc. Answers like these which do not include any motivation, reason or an explanation or the correct terminology which can be used to judge a learner's comprehension will not earn any marks and should be discouraged. This statement is clearly outlined in the instructions and information at the beginning of the question paper (instruction number 10).
- Learners do not read the questions/scenarios/instructions properly. They read until they think they know the answers, or they only notice some keywords and then they assume the rest of the question. Learners should be encouraged to read the whole question slowly and with comprehension before attempting to answer it. In many scripts it is clear that learners are losing marks because they do not read the questions properly. A lot of students tend to re-write the question as their answer. This is completely unacceptable. Learners should also be encouraged to read the instructions at the beginning of the question paper.
- **Mark allocation.** Teachers should indicate to learners that the paper is marked on a "one mark per fact" basis. Thus, if a question is indicated to count <u>two</u> marks, they need to write down <u>two</u> facts.
- **Handwriting**. As with all subjects, <u>handwriting</u> is a problem with many candidates where markers have difficulty deciphering the handwriting in order to mark the script.
- Answering of questions.
 - Start <u>each</u> new question on a <u>new page</u>.
 - <u>Leave a line open</u> between questions.
 - Answer the questions in the order they appear on the question paper.
 - Keep sub-sections of a question together.
 - Use the numbering system as indicated on the question paper for each question.
 - If learners decide not to attempt a sub-question of a question, they must at least write the number of the question so that markers can clearly see that a question has been left out. It makes it very difficult for markers who mark under a lot of pressure to lose time in an attempt to look for the correct answers.

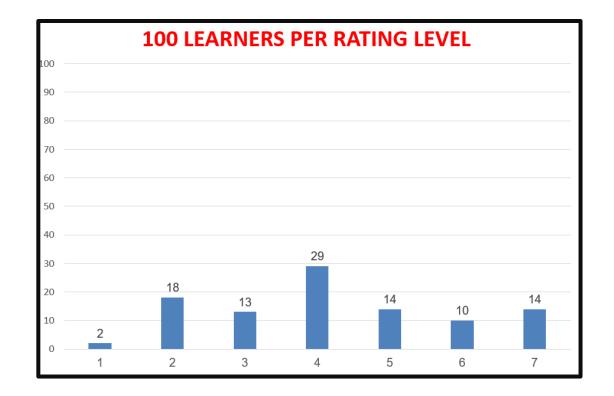
Some of the learners did not adhere to the instructions in the question paper as stated earlier in

this report. According to the instruction's learners are not allowed to just write: "cheaper", "faster", "easier", etc.

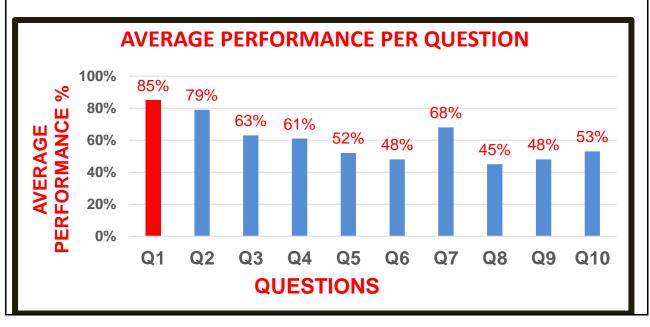
SECTION 2: Comment on candidates' performance in individual questions

NOTE: All the graphs in this section were created from data attained by entering the results of 100 random sample scripts. Please note that this does not reflect the most accurate picture as it is very difficult to extract a sample of 100 scripts, which would be 100% representative of the performance of the Eastern Cape.

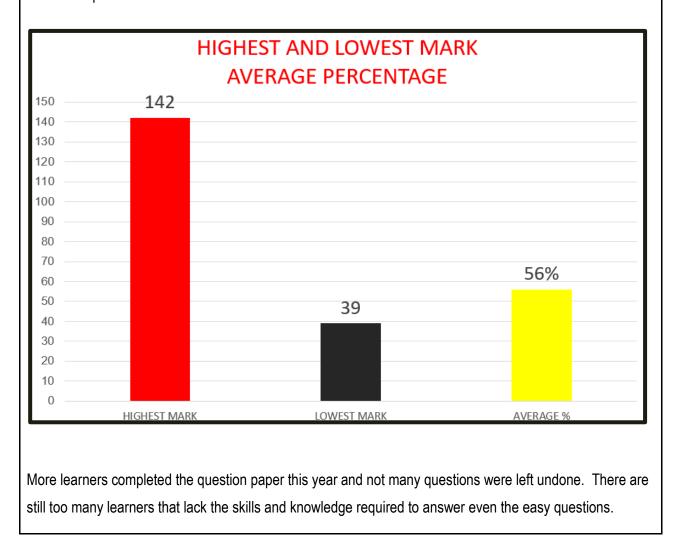
The graph below shows the percentage per rating level in the individual questions taken from the sample of 100 scripts of the learners in the Eastern Cape.



The following graph shows the average performance in the individual questions taken from the sample of 100 scripts.



The following graph shows the highest and lowest mark as well as the average total for CAT Paper 2 in the Eastern Cape.

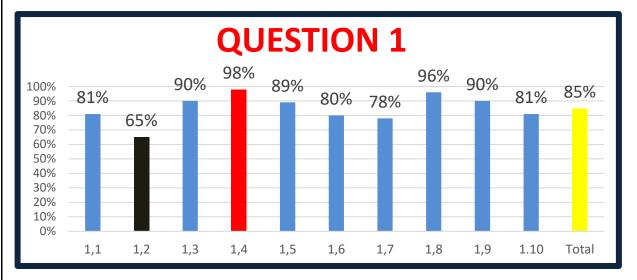


Comment on candidates' performance in <u>individual questions</u>

QUESTION 1

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

Average mark from th	ne sample of 100 :	9/10
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE
1.1 – 1.10	MATCHING ITEMS	85%



Question number	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	1.10	Tota I
Question Value	1	1	1	1	1	1	1	1	1	1	10
Maximum	1	1	1	1	1	1	1	1	1	1	10
Minimum	0	0	0	0	0	0	0	0	0	0	5
Average	81%	65%	90%	98%	89%	80%	78%	96%	90%	81%	85%
Median	1	1	1	1	1	1	1	1	1	1	9

The performance of learners in this question was very good.

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

Questions were quite straight forward for those who prepared well for the examination.

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

Question 1.4 and 1.7 allowed for three/two possible answers as indicated on the marking guideline.

Learners should be taught to arrive at an answer adopting a process of elimination. Selecting the most probable answers and then removing them one by one.

Also refer to the general comments in Section 1 of this report for more comments and suggestions which

could help teacher developments as well as advantage our learners.

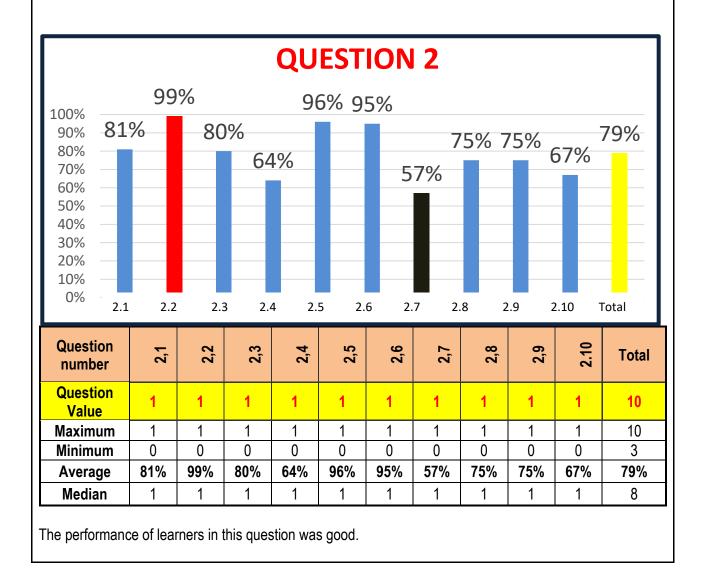
(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

Many learners continue not to answer some of the questions, which is quite surprising, or they tend to write down two options (A/B) as if the marker will choose between the 2 answers. Although this question is not a guessing game, learners should be encouraged too at least try an answer out of the options left. I would like to appeal to teachers to teach their learners to answer this question using the answer sheet provided.

QUESTION 2 (Summary)

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

Average mark from th	e sample of 100:	8/10
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE
2.1 – 2.10	MATCHING ITEMS	79%



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

Questions were quite straight forward for those who prepared well for the examination.

Question 2.6 allowed for two possible answers as indicated on the marking guideline because the question was interpreted differently by some of the learners.

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

Learners should be taught to arrive at an answer adopting a process of elimination. Selecting the most probable answers and then removing them one by one.

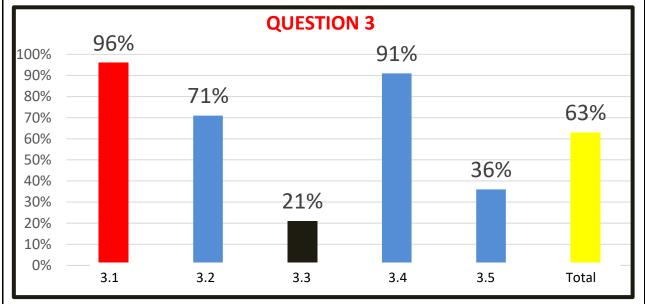
Also refer to the general comments in Section 1 of this report for more comments and suggestions which could help teacher developments as well as advantage our learners.

(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

Many learners continue not to answer some of the questions, which is quite surprising, or they tend to write down two options (A/B) as if the marker will choose between the 2 answers. Although this question is not a guessing game, learners should be encouraged too at least try an answer out of the options left. I would like to appeal to teachers to teach their learners to answer this question using the answer sheet provided.

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

Average mark from th	e sample of 100:	6/10
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE
3.1 – 3.5	TRUE/FALSE ITEMS	63%



Question number	3,1	3,2	3,3	3,4	3,5	Total
Question Value	1	1	1	1	1	5
Maximum	1	1	1	1	1	5
Minimum	0	0	0	0	0	1
Average	96%	71%	21%	91%	36%	63%
Median	1	1	0	1	0	3

The performance of learners in this question varied from average to poor.

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

Learners still battled with this question this year.

Learners are still not used to a question of this format where they had to identify whether a statement is true or false AND then make the false statements true by changing the underlined concept/term. Some of the learners changed the statement to make the underlined word true instead of changing the word to make the statement on the question paper true. Some learners only write false without the correct word next to it. I believe that with some input by teachers, the learners can do much better in this question in the future. Question 3.3 was poorly answered by most learners – learners don't learn Grade 10 and 11 work (primary and secondary memory).

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

Teachers should train the learners to answer question of this format by explaining to them how to attempt a question of this nature. They should then also expose learners to questions of this type in class tests and examination during the year. Practice from old question papers as well.

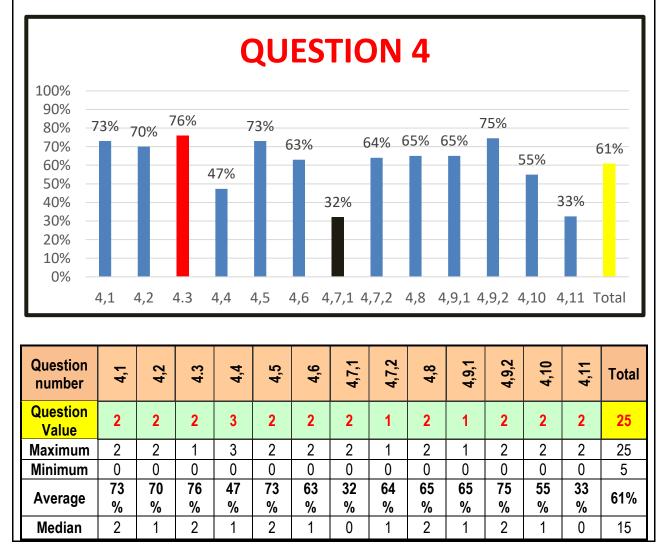
(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

This type of question might seem very easy, but too successfully answer a question of this format, learners should be taught to read the statements a few times with concentration and understanding. Teachers should pay attention to this during the year. This is something that learners should be taught and exposed to.

QUESTION 4

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

Average mark from th	ne sample of 100:	15/25				
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE				
4.1 – 4.11	SYSTEMS TECHNOLOGIES	61%				



The performance of learners in this question was average to good Learners found Questions 4.4, 4.7.1 and 4.11 the most difficult as seen in the graph above.

In cases where learners performed poorly it is mainly due to:

- Not answering questions in full sentences
- Not motivating their answers where needed
- Not reading the questions properly. They read questions only until they think they know what is requested and often they misinterpret the question.
- Lack of content knowledge.
- Learners seem to read only the first part of the question and assume what the rest of the questions will look like. In other cases, they identify key words in the question and repeat the question as part of their answer.

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

The following questions were poorly answered by the majority of learners. Teachers should take note and act accordingly:

Q 4.4

Poor response from learners. Learners don't know the basic hardware components to consider when buying a computer. This is Grade 10 work that is repeated in Grade 11 and 12.

Q 4.7.1

Poor response from learners. Learners did not understand this question and therefore did not know how to answer it. They repeated the question in their answers.

Q 4.11

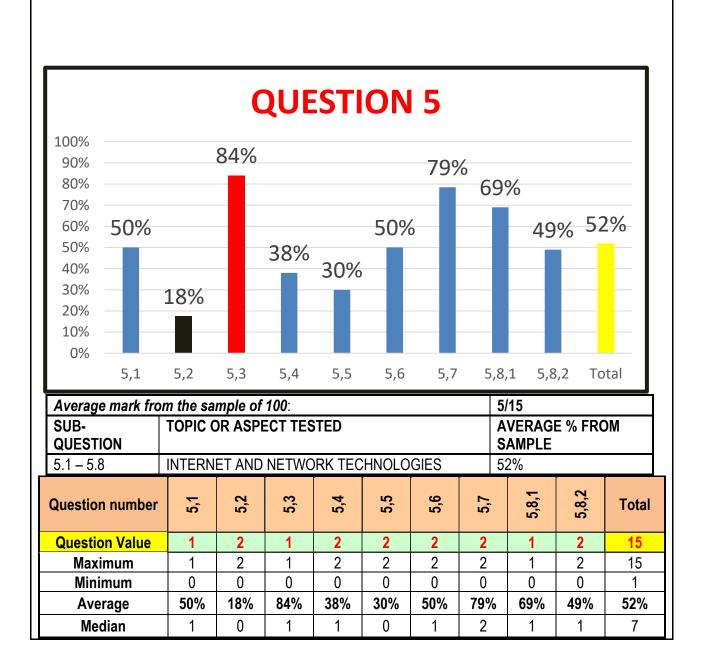
Poor response from learners. It seems as if learners were not exposed to the term defragmentation. This is Grade 11 work they needed to recall.

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

- Teachers should spend more time showing learners how to read a question in its entirety and explain how to break the question up into smaller sections to make it easier to understand. They should also be shown how to identify what the question wants with regards to advantages, disadvantages, reasons, etc.
- It seems as if teachers did not revise Grade 10 and 11 theory.

- (d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.
- As with most other questions learners do not read with comprehension. This might be due to a number of factors such as a language barrier or from skipping sections of the question and only focusing on specific keywords.
- Learners do not understand basic terminology which should have been engrained since Grade 10.
- As mentioned at the start of this report, many learners tend to write very vague answers using words like "this", "things", "stuff", "fast", "easy", "they", "it", etc. instead of the correct terminology.

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



The performance of learners in this question was average.

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

The following questions were poorly answered by the majority of learners. Teachers should take note of the following:

Q 5.2

Learners did not give the answers the marking guideline expects. Therefore majority of the learners did not get the marks.

Q 5.4

Poor responses from learners. Learners were exposed to the term intranet but not to the application of the term. Therefore they could not give two reasons why a company may choose not to use an intranet.

Q 5.5

All the learners gave **examples** of the Fourth Industrial Revolution and did not explain the meaning of the term. In other words the learners did not read the question.

Q 5.8.2

Learners are not exposed to receiving and sending e-mails and therefore they could not differentiate between high priority and flagging of an e-mail.

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

In cases where learners performed poorly it is mainly due to:

Lack of content knowledge, using wrong terminology as well as getting confused with some of the terminology. Teach basic terminology and put more time and effort into theory as well as the practical implementation of theory.

(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

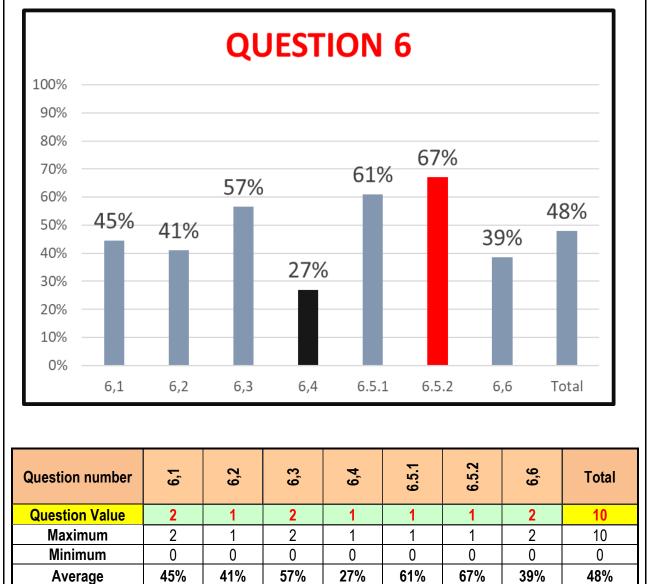
• Learners do not read with comprehension. This might be due to a number of factors such as a language barrier or from skipping sections of the question and only focusing on specific keywords.

• Learners don't look at mark allocations.

Learners don't know how to express themselves. Learners use to much general/vague terms and the memorandum only accepts certain words.

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

Average mark from th	e sample of 100:	5/10			
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE			
6.1 – 6.6	INFORMATION MANAGEMENT	48%			



The performance of learners in this question was very disappointing.

Median

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

The following questions were poorly answered by the majority of learners. Teachers should take note of the following:

Q 6.4

Poor response from learners. This question is coming straight from their PAT task application and it is clear from their answers that teacher did not explain the difference between a spreadsheet and a database as a way to process data.

Q 6.6

Learners did not fully understand this question. Teachers need to explain to the learners how to analyse data when they are given an extract.

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

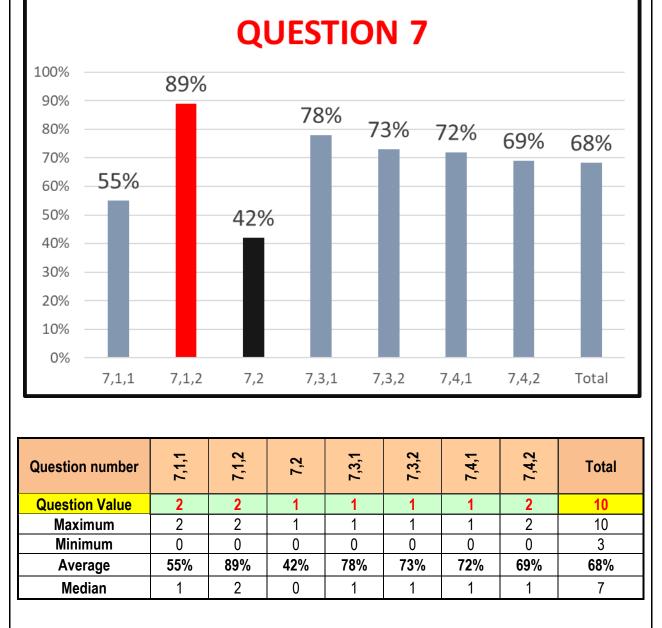
Teachers need to look at how they explain the PAT since the learners seem to struggle with answering this question. Teachers need to explain the difference between why data is processed in spreadsheets versus a database.

(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

I refer you to observations made in the responses of learners in general in this paper. They are basically the same for all questions.

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

Average mark from th	e sample of 100:	7/10
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE
7.1.1 – 7.4.2	SOCIAL IMPLICATIONS	68%



The learners' response to this question was good for a change.

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

The following question was poorly answered by the majority of learners. Teachers should take note of the following:

Q 7.2

Poor response from learners. Learners do not understand the term "social engineering".

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

It is clear that learners did not study definitions because they struggled to explain basic terms like green computing and virus. This is quite upsetting because this is basic Grade 10 theory.

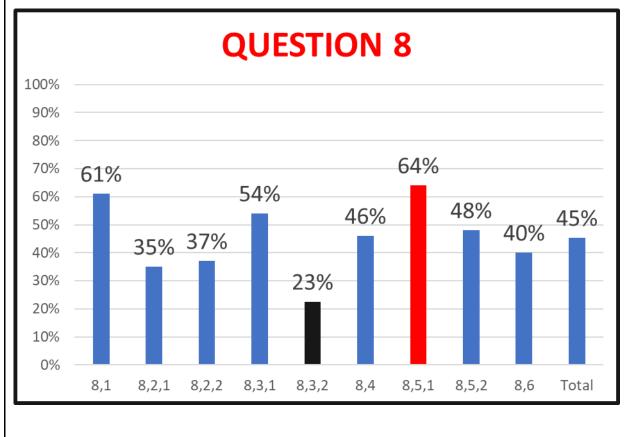
(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

Teachers are reminded that according to the CAPS syllabus, learners are assessed on all theory done from grade 10 - 12 in the final examination. Learners should therefore keep summaries of their gr 10 and 11 theory in notebooks. Throughout the grade 12 year, teachers should incorporate grade 10 and 11 knowledge in tests to prepare learners for the final examination.

QUESTION 8

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

Average mark from th	e sample of 100:	5/15				
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE				
8.1 – 8.6	SOLUTION DEVELOPMENT	45%				



Question number	8,1	8,2,1	8,2,2	8,3,1	8,3,2	8,4	8,5,1	8,5,2	8,6	Total
Question Value	1	2	1	1	2	2	1	2	3	15
Maximum	1	2	1	1	2	2	1	2	3	15
Minimum	0	0	0	0	0	0	0	0	0	0
Average	61%	35%	37%	54%	23%	46%	64%	48%	40%	45%
Median	1	1	0	1	0	1	1	1	1	6
The learners' response to this question was extremely poor. These questions were based on practical										
The learners' response to this question was extremely poor. These questions were based on practical work. This is a good example of teaching theory together with practical work.										

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

In cases where learners performed poorly it is mainly due to:

- They don't know the reasons for using a leader line in word processing.
- They are not familiar with the word "features". This was mentioned in previous years reports as well.

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

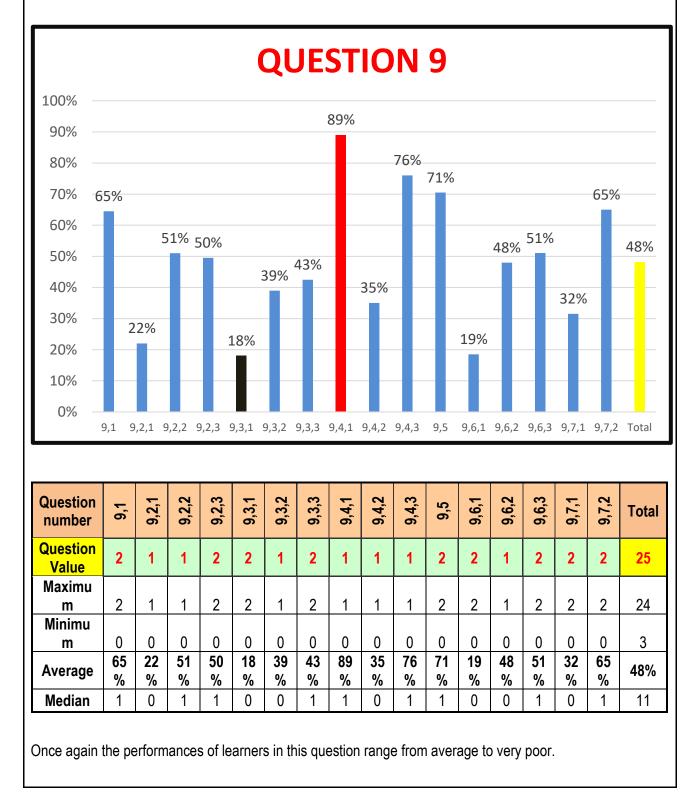
When teachers do practical, they need to explain the theory or how it works in theory as well. Explain to the learners how to use certain functions as well as the advantages of using certain features in the different programs.

(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

Learners do not know how to apply practical work in theoretical context.

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

Average mark from th	e sample of 100:	12/25
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE
9.1 – 9.7.2	INTEGRATED SCENARIOS	48%



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

The following question was poorly answered by the majority of learners. Teachers should take note of the following:

Q 9.2.1 – 9.2.2

Learners did not respond well to this question because they did not know what an AUP is. They also did not know the meaning of a network adapter.

Q 9.3.1

Learners did not respond well to this question based on how the marking guideline expected them to answer.

Q 9.6.1

Learners did not respond well to this question. Learners still do not know the different types of application software. They tend to write the examples of application software and not the type of application software. Learners once again do not understand the meaning of the word "feature".

Q 9.7.1

Learners did not respond well to this question because this is an application question and the learners are not familiar with NFC payments although it is part of the syllabus. Learners also could not give two methods used to make online payments.

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

Teach basic terminology and put more time and effort into theory as well as the practical implementation of theory.

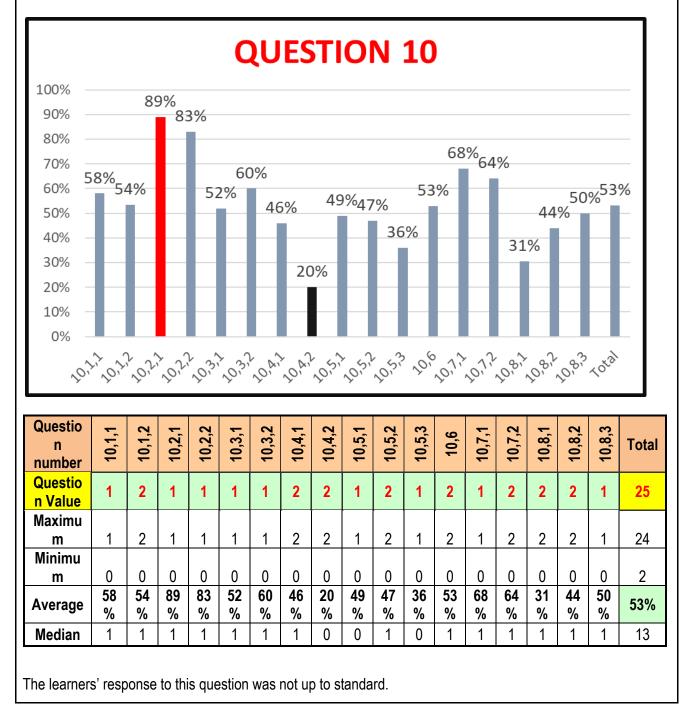
(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

Please refer to the general comments at the start of this section for comments, suggestions and general

ideas which could help teacher development as well as advantage our learners.

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

Average mark from the sample of 100:		13/25
SUB-QUESTION	TOPIC OR ASPECT TESTED	AVERAGE % FROM SAMPLE
10.1 – 10.8	INTEGRATED SCENARIOS	53%



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

The following question was poorly answered by the majority of learners. Teachers should take note of the following:

Q 10.4.2

Poorly answered. Learners don't know what a card reader is.

Q 10.5.3

Learners did not respond well to this question - they could not identify the technology used by RFID tags.

Q 10.8.1

Learners did not respond well to this question. This question was based on practical work. This is a good example of teaching theory together with practical work.

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

Teach basic terminology and put more time and effort into theory as well as the practical implementation of theory.

(d) Describe any other specific observations relating to responses of learners and comments that are useful to teachers, subject advisors, teacher development etc.

Please refer to the general comments at the start of this section for comments, suggestions and general

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