EXAMINATIONS AND ASSESSMENT CHIEF DIRECTORATE
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2018 NSC CHIEF MARKER'S REPORT

SUBJECT:	**CIVIL TECHNOLOGY- CIVIL SERVICES**
PAPER:	**1**
DURATION OF PAPER:	**3HRS**
DATES OF MARKING:	**01/12/2018-13/12/2018**

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

A variety of performances was obtained by the 11 learners in the **Civil Services** question paper. Although the paper was set up fair, some learners performed poorly.

Some candidates obtained high marks in some questions but scored less marks in other questions indicating that not all the content was covered. There were a few learners who left out some sections of the paper but overall all candidates finished the question paper. Free hand sketches like Question 3.2 can be drawn in answer books instead of using answer sheets which would allow for marking to be easier. Learners must look at the rubrics to see mark allocation.

In analysing the type of answers in the 11 papers of the learners who performed poorly, it indicates to a knowledge gap in especially in calculating of quantities and poor drawing skills.

These challenges could be caused by not enough revision of work, wrong textbooks, language barrier, insufficient guidance, poor mathematical skills and insufficient commitment by learners.

As a whole, the learner performance in this question paper indicate a lack of general knowledge in civil services with an average mark of 35%.

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

QUESTION 1

Knowledge of construction safety was tested in this question with emphasis on construction, tools, joining and materials.
Question 1 was adequately answered by most learners although some centrums struggled with the construction questions. Safety questions were answered adequately.
(b) Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.
Question 1.1 Match description from column B to item in column A: This question was answered reasonably well.
Question 1.2. Two safety precautions when working on scaffolding: Most learners answered this question correctly.
Question 1.3 Purpose of guard rail: Most learners answered this question correctly. Some learners name safety rule for scaffolding that was not specific to the guard rails.
Question 1.4 Purpose of painting: For protection and aesthetic appearance and not to prevent cracks in the wall.
Question 1.5 One advantage of curing of concrete: Most learners answer this question correctly.
Some learners name the methods to cure concrete instead of the advantages.
Question 1.6 Identify tool: 1.6.1 Multi-detector not laser detector.
1.6.2 Used to detect materials behind wall not under soil. Determine distance.
1.6.3 Prevent batteries from running flat and acid leaks can damage tool.
Question 1.7.1 Identify A and B: This question was answered satisfactory.
Most learners knew the bolt and nut but wrong answers were given for the raw bolt.
Question 1.7.2 Explain one use of each: This question was answered reasonably well, but some learners did not know the correct use for each one. Rawl bolt is used to anchor parts to a wall and not a bolt and nut.
QUESTION 2. Answered on answer sheet.

Knowledge of graphics and communication was tested in this question.
Some learners did not answer question15 – 28 at the back of answer sheet 2. Question 2 Nr. 1 – 7 Learners had to identify the items as indicated on the answer sheet. Knowledge of drawing symbols need to be improved, most of the building industry communicates by means of drawings.
Question 2 Nr. 8 + 9 Most learners had the date and name correct.
Question 2 Nr.10 – 12 Most learners could identify the features. - Ramp / stairs / gable roof.
Question 2 Nr.13 - Explain purpose of ridge plate.
Question 2 Nr.14 - Explain purpose of gutter.(facia board)
Question 2 Nr.15-18 – Explain meaning off…… Question 2 Nr.19 - Most learners answered bathroom. Question 2 Nr.20 – Most learners indicated it shows the direction of window opening. Question 2 Nr.21 - a Few learners wrote the width instead of height of 1.2m. Question 2 Nr.22 - a Few learners wrote the height instead of width of 2m. Question 2 Nr.23 – a Few learners answered front view instead of west elevation. Question 2 Nr.24 – Adequately answered by most learners. window / sliding door. Question 2 Nr.25 – Many variations of two types of lights. Fluorescent / ceiling light. Question 2 Nr.26 – Answered correctly by most learners (tiles) Question 2 Nr.27 – Scale was correctly answered by most learners. (1:50/100/200) Question 2 Nr.28 – Shower was correctly answered by most learners. Question 2 Nr.29 – Many learners calculated wrong by using wrong measurements or did not know the formula to calculate area. (l x b x h = m²) Question2 Nr.30 – Many learners struggled to calculate the perimeter of the building. Some measurements were omitted or added up wrong which show poor mathematical skills. Teachers must emphasize the Building Drawing Practice requirements. Many construction methods are explained by means of drawings, therefore it is important for learners to know all the symbols for construction.
QUESTION 3 CONSTRUCTION – SERVICES, OHSA, QUANTITIES.
3.1 Questions on manhole were answered adequately by most learners. 3.2 The section of the T- junction of half-brick wall was poorly answered. Teachers must emphasize the Building Drawing Practice requirements. Some drawing were very untidy and out of proportion.

3.3 Safety during excavations.

3.4 Shoring in different soil types. Learners must know the correct labels for shoring.

3.5 Most learners chose the correct word. Answered satisfactory by most learners.

3.6 Manhole. Quantities.

Many learners struggled to do the calculations that was asked which show poor mathematical skills. Volume – L X B X H. Learners must first calculate centre line for manhole before calculating the number of bricks required.

QUESTION 4 COLD/ HOTWATERSUPPLY, TOOLS, MATERIALS.

4.1 Geyser: Most learners answered this question correctly.

4.2 Learners answered the faults in hot water systems poorly.

4.3 Most learners chose the correct description as was indicated.

4.4 Many learners draw the wrong symbols for the valves. Many construction methods are explained by means of drawings, therefore it is important for learners to know all the symbols for civil services.

4.5 Many learners could not explain how to fix leaking copper pipe.

4.6 Learners must know the correct labels for the P-Trap.

Watertight seal will prevent pipe from leaking.

4.7 Learners must know the difference between a Bib tap and a Stop tap.

4.8 Water meter used to calculate amount of water consumed.

4.9 Dezincification. No correct answer.

4.10 Use chemicals / wire brush to clean rust.

4.11 Hydro – electrical energy.

4.12 Use drain rods / plunger to clean blockages.

4.13 Use compressed – air tester to detect leakages underground.

QUESTION 5 GRAPHICS & COMMUNICATION,ROOF WORK,STORM WATER.

5.1 Most learners could choose the correct word from the list supplied.

5.2 Some learners drawings were untidy and drew the gutter incorrectly.

5.3 The development of the cone was poorly answered. A number of learners did not use the rubric provided which resulted that they did not complete all the assessment criteria. All construction lines must be shown.

QUESTION 6 SEWERAGE,SANITARY FITTINGS AND JOINING.

6.1 Most learners choose the correct missing word.

6.2 Drain pipes was answered satisfactory.

6.3 Poorly answered by all candidates. Learners must know how to draw the sewerage system on a site plan by using all the correct symbols.

6.4 Poorly answered.

6.5 Learners must learn the function of anti - siphonage pipe.

6.6 Learners must learn the correct joining methods for sewer pipes.

6.7 Satisfactory answered.

6.8 It is important for learners to know all the symbols for civil services.

6.9 Materials for sanitary fittings were answered satisfactory.

6.10 Plumbers solder.

6.11Chemical anchors can be used to fix brackets / lights to a wall.

6.12 Few learners knew the rivet gun.

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

A number of learners did not use the rubric provided which resulted that they did not complete all the assessment criteria

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

In analysing the type of answers in the papers of the centrums who performed poorly, it indicates to a knowledge gap in especially in quantities and drawings. These challenges could be caused by not enough revision of work, wrong textbooks, language barrier, insufficient guidance, poor teacher content knowledge, poor mathematical skills, and insufficient commitment by learners.

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

A number of learners did not use the rubric provided which resulted that they did not complete all the assessment criteria

Many learners struggled to do the calculations that was asked which show poor mathematical skills. Teachers must emphasize the Building Drawing Practice requirements. Many construction methods are explained by means of drawings, therefore it is important for learners to know all the symbols for construction.

If there are less than 100 learners for <u>Civil Services</u> it should be sent to another province to be marked. Only 11 scripts for Civil Services were marked in 2018.