

## REKENAARSTUDIES SG VRAESTEL 1

### Algemeen

Met enkele uitsonderings, was die kandidate se werk netjies en leesbaar.

In afdeling B het kandidate punte verloor omdat hulle nie die vrae in volsinne beantwoord het nie. Soms word net die kernwoorde neergeskryf wat nie sin maak nie. “Toevoer en afvoertoestelle” kan byvoorbeeld nie as ‘n funksie van die bedryfstelsel aanvaar word nie. Die bestuur/beheer van toevoer en afvoertoestelle, sou wel punte verdien het. Leerkragte moet dit asseblief baie beklemtoon in hulle onderrig en in die interne toetse en eksamens van graad 10 tot 12.

Alhoewel geen spesifieke handboek voorgeskryf is nie, word skole aangeraai om alle handboeke te raadpleeg. Verouderde handboeke sal beslis ‘n negatiewe invloed op die kandidate se uitslae hê. Resente rekenaartydskrifte is ‘n waardevolle bron van inligting oor toekomstige neigings en vooruitgang in IKT.

By sommige sentrums begin kandidate nie elke vraag op ‘n skoon bladsy nie.

Meervoudigekeusevrae moet met ‘n kruisie beantwoord word.

Kommentaar op spesifieke vrae.

### VRAAG 1 en 2

Kandidate moet leer om al die opsies wat gegee word noukeurig te oorweeg en nie sommer lukraak die eerste antwoord wat reg lyk te kies nie. Daar moet genoeg tyd aan die beantwoording van hierdie vrae gespandeer word.

### VRAAG 3 Datakommunikasie.

Baie kandidate het gesukkel met vraag 3.2 omdat hulle nie besef het dat die twee tipes netwerke met mekaar vergelyk word nie. Dit het weereens geblyk dat kandidate nie die aanloop tot die vraag noukeurig lees, voordat hulle dit beantwoord nie. Leerders verwar die topologie Token Ring met die protokol, Token Passing. Gebruikersregte moet in ‘n wyer konteks aangespreek, en nie net binne die skoolverband nie.

Vraag 3.4 moet leerders in volsinne beantwoord – nie net sekuriteit nie, maar ‘n rekenaar bied verhoogde sekuriteit.

### VRAAG 4

Die waaier op die SVE hou slegs die SVE en nie die hele rekenaar koel nie.

By vraag 4.2 was die opgradering van apparatuur verwag. Kandidate het dit met ‘n vraag in ‘n vorige vraestel verwar en tegnieke gegee waarmee die spoed van ‘n rekenaar opgegradeer kan word.

Kandidate het nog steeds nie ‘n duidelike begrip van die verskil tussen primêre en sekondêre geheue nie.

Min kandidate het geweet van LCD- en CRT-monitors.

### VRAAG 5

Die onvermoë van kandidate om ‘n leesstuk met insig te lees het duidelik geblyk.

Kandidate weet oor die algemeen nie waarom ‘n hardeskyf in partisies gedeel word nie.

Kandidate moet versigtig wees wanneer hulle die funksies van die bedryfstelsel neerskryf. Woorde soos kontoleer, bestuur en beheer moet gebruik word.

### VRAAG 6

Kandidate lees nie die vrae deeglik nie en gee dan antwoorde wat nie van toepassing is nie. So sal hulle by vraag 6.3 sosiale euwels neerskryf in plaas van gesondheidsprobleme wat as gevolg van rekenaars ontstaan. Hulle begryp ook nie wat ‘n beroepsveld soos administrasie behels nie.

‘n Valdeur word deur ‘n programmeerder in ‘n program ingebou wat later onwettige toegang tot die gebruiker se rekenaar moontlik maak. Kandidate moet versigtig wees met die bewoording van hulle antwoorde. Toegang as sulks, is nie ‘n misdad nie.

### VRAAG 7

Hierdie vraag is uiters swak beantwoord. Dit blyk dat kandidate nie by magte is om die praktiese werk, teoreties te hanteer nie. Die skermstortings (“screen dumps”) is nie behoorlik bestudeer om

die vrae te beantwoord nie. By vraag 7.2 was die antwoorde letterlik in die skermstorting gegee maar kandidate was nie in staat om dit neer te skryf nie.

Leeders moet waak teen onsinnige antwoorde soos: 'n "Vertical ruler" is 'n liniaal wat vertikaal loop.

Vraag 7.4 oor die databasis is baie swak beantwoord. Kandidate het nie geweet dat die syfer 999999 as "Long integer" gestoor moet word nie. (Byte stoor syfers vanaf 0 tot 255, Integer vanaf -32 768 tot 32 767 en Long integer vanaf -2 147 483 648 tot 2 147 483 647 – natuurlik sal dit nooit van SG-kandidate verwag word om hierdie presiese waardes te memoriseer nie maar hulle moet tog 'n idee hê van die verskillende datatipes).

Die kriterium van 'n navraag kon ook nie teoreties opgestel word nie.

VRAAG 8 en 9

Baie min kandidate het die opsie uitgeoefen om hierdie vrae te beantwoord. Die wat dit wel gedoen het, kon nie onderskei tussen sintaks-, looptyd- en logiese foute nie. Die leesbaarheid en gebruikersvriendelikheid wat in vraag 8.2 en 9.2 gevra is, is swak beantwoord. By vraag 8.3.4 en 9.3.4 het sommiges vergeet dat die waarde van S3 in die vorige stap verander het.

## COMPUTER STUDIES SG PAPER 1

### General

With a few exceptions, the work of the candidates was neat and legible.

Candidates forfeited marks in Section B when the questions were not answered in full sentences. Sometimes only vague words or phrases were written down. "Input and output devices", for example, cannot be accepted as a function of the operating system. An answer such as "The management of input and output devices" would have earned marks. Teachers are requested to emphasise this in their teaching and internal tests from Grade 10 to 12.

Although no specific textbook is prescribed, schools are advised to consult all the available textbooks and not to use one book only. Outdated textbooks will definitely have a negative influence on the results of the candidates. Recent computer magazines are a valuable source of information on modern trends and development of ICT.

At certain centres candidates did not start each question on a new page.

Multiple-choice questions must be answered by making a cross over the number chosen.

Comments on specific questions.

### QUESTION 1 and 2.

Candidates must learn to study each option carefully and not simply choose the first answer that looks correct. Enough time must be allocated to the answering of these questions.

### QUESTION 3 Data communication.

Many candidates struggled with Question 3.2 because they did not realise that they were meant to compare the two kinds of networks. It was clear that candidates did not read the introduction before attempting the questions. Candidates became confused between the topology, Token Ring, and the protocol, Token Passing. User rights must be addressed in a wider context than that of the school and the computer laboratory.

Question 3.4 should have been answered in a full sentence. An answer such as "Security" has no meaning. It should be "A network provides better security".

### QUESTION 4

The fan on the CPU does not cool down the whole computer.

In Question 4.2 the upgrading of hardware was expected. Candidates confused it with a question in a previous paper and provided techniques for upgrading the speed of a computer. Candidates could still not distinguish between the primary and the secondary memory.

Only a few candidates knew about LCD and CRT monitors.

### QUESTION 5

Candidates could not read the information at the beginning of the question with insight.

Candidates in general do not know why a hard drive is divided into partitions. Candidates must be careful when writing down the functions of the operating system. Words like "control" or "manage" must be used.

### QUESTION 6

Candidates did not read the questions properly and gave answers that were not relevant. In Question 6.3 they wrote "Social hazards" instead of "Health problems related to computers".

They did not understand what was meant by "careers in the field of administration".

A trapdoor built into a program by a programmer will allow illegal access to the computer of the user at a later stage. Candidates must be careful in the formulation of their answers. Legal access to a computer, as such, is not a crime.

### QUESTION 7

This question was answered exceptionally poorly. Candidates were not able to handle practical work in a theoretical manner. The screen dumps were not studied well enough to answer the questions. In Question 7.2, the answers were given in the screen dump, but the candidates were not able to write them down.

Candidates must not provide meaningless answers like "A vertical ruler is a ruler that is vertical".

Question 7.4 on the database was answered poorly. Candidates did not know that the figure 999999 is to be stored as "Long integer". (Byte stores figures from 0 to 255, Integer from -32 768 to 32 767 and Long integer from -2 147 483 648 to 2 147 483 647. It will, naturally, never be expected of SG candidates to remember these exact values, but they should have an idea of the different data types. The criterion of the query could also not be compiled theoretically.

QUESTION 8 and 9

Only a few candidates attempted this question. Those who did could not distinguish between syntax, runtime and logic errors. Readability and user-friendly programming required in Questions 8.2 and 9.2 were poorly answered. At Question 8.3.4 and 9.3.4, some forgot that the value of S3 had been changed in the previous step.