

**COMPUTER STUDIES STANDARD GRADE
PAPER 2: THEORY**

**QUESTION 1
COMPUTER ARCHITECTURE**

- 1.1.a) 40 GB (1)
- 1.1.b) 256 MB (1)
- 1.1.2 2.4 GHz (1)
- 1.1.3 network card (or "network interface card") (1)
- 1.1.4 (a) Universal Serial Bus (1)
(b) any three of: (3)
mouse, Flash memory stick, printer, scanner
... add more devices here
- 1.1.5 external bus (1)
- 1.1.6 (a) Double Data Rate (1)
(b) Data is sent on the rise and fall of the clock pulse. On previous SDRAM it was only sent once with each clock pulse, so with DDR SDRAM the transfer rate is doubled. (2)
- 1.1.7 (a) SCSI (1)
(b) Any two of: (2)
Two hard drives can be plugged into an IDE interface
Built into the motherboard of most new computers
Rate of data transfer is slower than a SCSI interface
- 1.1.8 B & D (2)
- 1.2.1 The hard drive (1)
- 1.2.2 A platter is a round disc (candidates might explain further, but the point is to note whether they know that it is a round disc) (1)
- 1.2.3 A sector is a pie-shaped section on a platter (1)
- 1.3.1 Yes, the data can be changed.
- 1.3.2 Reason: Data is changed by shining an ultra-violet light through a little window (2)
- 1.4 Any two of: (2)
 - current date and time
 - boot-up sequence of computer
 - which hard drives are installed
 add more
- 1.5 Pipelining: (3)
 - refers to a method of processing inside the CPU
 - instructions are divided up into phases
 - more than one instruction can be in the CPU pipeline at the same time

OR

Pipelining is a method of processing where the processor is able to read new instructions from memory before the instructions that is currently being processed is completely processed. (3)

1.6 Printer (1)

1.7 Video camera (1)

1.8 Difference: With Firewire the rate of data transfer is much faster
Similarity: Both Firewire and USB are serial ports
add more... (2)

TOTAL FOR QUESTION 1: [31]

QUESTION 2 SYSTEM SOFTWARE

2.1. Any two of the following: (2)

1. **The Windows XP engine.** Faster performance than with Windows 2000 and Windows 98
2. **Remote Desktop.** Can connect with one's office network, and send documents to the office when one is away.
3. **Windows Messenger.** You can also place voice calls from your computer to a telephone.
4. **System Restore.** A facility which makes it possible to roll back the system to what it was on a date prior to the current problem.
5. **Encrypting File System.** The Encrypting File System (EFS) technology in Windows XP can be used to protect sensitive data.
6. **Enhanced wireless networking support.** More support for wireless connections.
7. **Network Setup Wizard.** A wizard which enables one to share the Internet connection, firewall and printer with other computers on the network.

2.2 Any two of:

- Shaad did not update the anti-virus program regularly
- The anti-virus program was installed without checking first that his computer was not infected with a virus already
- His computer could be infected with a new virus, which his anti-virus program could not detect yet (2)

2.3 To prevent unauthorized access to one's computer (1)

2.4.1 FALSE

2.4.2 FALSE

2.4.3 FALSE

2.4.4. TRUE (4)

2.5 C & E (2)

2.6 Any two of:
Novell Netware, Linux, Unix, Windows 2000 Server
add more... (2)

2.7.1 In multi-tasking more than one process is executed on the computer at the same time. (2)
(Note to markers: do not give a mark if the learner indicates that more than one instruction is performed in the CPU at the same time)

2.7.2 DOS
add... (1)

2.8.1 spooler
2.8.2 bootstrap loader
2.8.3 defrag
2.8.4 scheduler (4)

TOTAL FOR QUESTION 2: [20]

QUESTION 3 BINARY LOGIC

3.1 NOT, AND, OR (2)

3.2 $A + A' = 1$ (1)

3.3

$$\begin{aligned} & b(a + c) + b'c \\ &= 1(0 + 1) + 1'.1 \\ &= 1(0 + 1) + 0.1 \\ &= 1(1) + 0 \\ &= 1 + 0 \\ &= 1 \end{aligned}$$

(3)

$$F(X, Y, Z) = X' + (YZ')$$

X	Y	Z	X'	Z'	YZ'	F
0	0	0	1	1	0	1
0	0	1	1	0	0	1
0	1	0	1	1	1	1
0	1	1	1	0	0	1
1	0	0	0	1	0	0
1	0	1	0	0	0	0
1	1	0	0	1	1	1
1	1	1	0	0	0	0

(4)

TOTAL FOR QUESTION 3: [10]

QUESTION 4
DATA COMMUNICATION

4.1.1 Candidates can answer:

“Yes”; in the case of certain newer operating systems and network cards, a Plug and Play installation takes place without user intervention

OR:

“No”; George must also install the driver for the network card

The point here is that the learner indicates that a driver is needed

(2)

4.1.2 Any two of:

- can make use of a printer on the network
- can communicate with others on the network by sending messages
- can access files which are stored on the network
- can make backups of files on a shared server somewhere on the network, instead of having to backup to stiffies/CD/USB Flash stick

(2)

4.2.1 TV antenna

(1)

4.2.2 Description must include two of:

- two conductors
- central axis
- inner insulation between the two conductors

(2)

4.2.3 UTP

(1)

4.3 Ethernet

(1)

4.4 One of:

- convert digital signals from computer into appropriate signal to be sent through network card
- sense traffic on network (in case of CSMA/CD)
- perform functions to inspect token, etc, in token ring network

(1)

4.5.1 permanent connection

(1)

4.5.2 the upload and download speeds are different

(1)

4.5.3 TCP/IP

(1)

4.5.4 Protocol describes the rules and regulations that govern communication between computers

(2)

4.6 Four of the following facts must be in the description:

- the first computer that starts up in the network generates a token
- the token travels in one direction from computer to computer
- a computer that wishes to send a message attaches the message to the token and marks it as busy
- every other computer checks the token to see if the message is addressed to it
- the receiving computer copies the messages and marks the token as free

(4)

4.7 Token ring architecture and FDDI

(2)

4.8.1 C

4.8.2 D

4.8.3 A

4.8.4 B

(4)

4.9.1 E

4.9.2 D

4.9.3 B

4.9.4 G

4.9.5 F

4.9.6 C

4.9.7 A

(7)

TOTAL FOR QUESTION 4: [32]

QUESTION 5

Internet and new technology

5.1 web browser

(1)

5.2 URL (1)

5.3 underlined text on a web page – when a user clicks on this text, a different web page is loaded

(2)

5.4 Hypertext Markup Language

(1)

5.5 Accept as correct, one of:

www.sportscars.com

http://www.sportscars.com

(1)

5.6.1 FALSE

5.6.2 FALSE

5.6.3 FALSE

5.6.4 TRUE

5.6.5 FALSE

(5)

5.7 Wireless Application Protocol

(1)

5.8 Devices such as cellphones cannot download as much data from the Internet as a computer can, due to limited bandwidth. WAP is used to govern the communication of reduced sized web pages to handheld devices. (2)

5.9

any two of:

- stylus
- keypad
- attachable keyboard (2)
- touchscreen
- voice recognition technology

5.10 two of:

- transfer using Bluetooth
- transfer using infrared
- transfer using serial cable (2)
- USB cable
- wireless communication (via wireless Internet service provider)

5.11.1 FALSE

5.11.2 TRUE

5.11.3 TRUE

5.11.4 TRUE (4)

TOTAL FOR QUESTION 5: [22]

QUESTION 6 SOCIAL IMPLICATIONS

6.1 Any three of:

- Quick to add figures in Excel
- Quick to process information using a database
- Can change documents easily in Word, without retyping etc (3)

6.2 Any two of:

- They do not have all the equipment in stock; can order as customers order via the website
- Their customer base is widened to include the whole world
- If they have a good web system it is quick to add images of new stock on the site (quicker than unpacking the goods onto the shop floor)
- Their trading hours become 24 hours of the day, instead of business hours only (2)

add more...

6.3.1 One of:
 spyware – collects information from one’s computer (1)
 add more...

6.3.2 The police can quickly access information about wanted criminals
 Tracking system for stolen vehicles (1)
 add more...

6.4.1 A worm is

- a program
- that replicates itself
- it does not need to attach itself to a file (whereas a virus does)
- it carries out malicious acts on a user’s computer

Mark allocation:

One mark for “does not attach itself to a file”

Two marks for any two of the other points (3)

6.4.2 An executable virus attaches itself to *.exe files or *.com files(1)

6.4.3 A macro virus attaches itself to programs that use the macro language (like
 Microsoft Word) (1)

6.5 One of:

- block a sender in Outlook Express
- place a certain address in a spam filter (1)

6.6 Two of:

- Some persons who are not able to write, can use the computer keyboard to type text
- A paraplegic who has difficulty moving around, gains a lot of access to the outside world through the use of the Internet
- There are special input devices for persons who cannot use their hands (i.e. input to a computer)

add more... (2)

TOTAL FOR QUESTION 6: [15]

QUESTION 7 APPLICATIONS AND PACKAGES

7.1 Linux (1)

7.2 Star Office (1)

7.3.1 accounting

7.3.2 spreadsheet

7.3.3 database (3)

7.4 Any three of:
use indenting
use bullets
place a page border
add pictures

(3)

7.5.1 Insert
7.5.2 Edit

(2)

7.6.1 Name of function could be spelt wrong

7.6.2 A formula or function cannot do the necessary calculations as cell references refer to non-numeric characters

7.6.3 The given function or formula requires a division by 0.

(3)

7.7.1 four

7.7.2 two

7.7.3 0

7.7.4 3

(4)

7.8.1 one of: text, alpha

7.8.2 4.8

7.8.3 Johannesburg

(3)

TOTAL FOR QUESTION 7: [20]

**REKENAARSTUDIE STANDAARDGRAAD
VRAESTEL 2: TEORIE**

**VRAAG 1
REKENAAR-ARGITEKTUUR**

- 1.1.a) 40 GB (1)
 1.1.b) 256 MB (1)
 1.1.2 2.4 GHz (1)
 1.1.3 netwerkkaart (1)
 1.1.4 (a) Universal Serial Bus (1)
 (b) enige drie van: (3)
 muis, Flash geheue stasie, drukker, aftaster
 ... voeg meer by
- 1.1.5 eksterne bus (1)
 1.1.6 (a) Double Data Rate (1)
 (b) Data word versend met die opgaande en afgaande fase van die stelselklok.
 In vorige SDRAM is data slegs een keer per slag van die stelselklok versend. Dus word
 die oordragspoed verdubbel met DDR SDRAM. (2)
- 1.1.7 (a) SCSI (1)
 (b) Enige twee van:
 • Twee hardeskywe kan by 'n IDE koppelvlak ingeplug word
 • Word ingebou in die moederbord van die meeste nuwe rekenaars
 • Data oordragspoed is stadiger as die van 'n SCSI koppelvlak (2)
- 1.1.8 B & D (2)
- 1.2.1 Die hardeskyf (1)
 1.2.2 plaat – 'n ronde skyf (kandidate kan verder verduidelik, maar die punt is om te sien
 of hulle weet dat dit 'n ronde skyf is (1)
 1.2.3 sektor – deel van 'n plaat wat soos 'n pizza-skyf gevorm is (1)
- 1.3 Ja, die data kan verander word
 Rede: 'n mens kan die data verander deur 'n ultra-violet lig deur 'n klein venstertjie te skyn.
 (2)
- 1.4 Enige twee van:
 • huidige datum en tyd
 • boot-up volgorde van die rekenaar
 • watter hardeskywe geïnstalleer is (2)
 voeg nog by
- 1.5 Pyplynverwerking:
 • verwys na 'n metode van verwerking binne die SVE
 • instruksies word verdeel in fases
 • meer as een instruksie kan gelyktydig in die SVE se pyplyn wees (3)

Pyplynverwerking is 'n metode van verwerking waar die volgende instruksie gelees word voordat die instruksie wat die verwerking besig is om te verwerk, klaar verwerk is.

(3)

1.6 Drukker

(1)

1.7 Video kamera

(1)

1.8 Verskil: Met Firewire is die data oordragspoed baie vinniger
Ooreenkoms: Beide Firewire en USB is serie poorte
Voeg nog by...

(2)

TOTAAL VIR VRAAG 1: [31]

VRAAG 2 STELSEL PROGRAMMATUUR

2.1. Enige twee van die volgende:

(2)

1. **The Windows XP engine.** Vinniger werkverrigting as met Windows 2000 en Windows 98
2. **Remote Desktop.** Kan 'n verbinding vorm met die kantoor-netwerk, en dokumente stuur wanneer 'n mens weg van die kantoor is.
3. **Windows Messenger.** Kan telefoon-oproepe maak vanaf 'n mens se rekenaar.
4. **System Restore.** 'n Fasiliteit wat dit moontlik maak om die stelsel terug te plaas in die vorm wat dit gehad het op 'n vroeër datum, voordat die huidige probleem plaasgevind het.
5. **Encrypting File System.** Die Encrypting File System (EFS) tegnologie in Windows XP kan gebruik word om sensitiewe data te beskerm
6. **Verbeterde ondersteuning vir "wireless" netwerking verbindings.** Meer ondersteuning vir "wireless" konneksies.
7. **Network Setup Wizard.** 'n Wizard wat 'n mens help om die rekenaar se Internet verbinding, "firewall" en drukker-verbinding te deel met ander rekenaars.

2.2 Enige twee van:

- Shaad het nie die anti-virus program gereeld laat opdateer nie
- Die anti-virus program is geïnstalleer sonder om eers seker te maak dat daar nie alreeds 'n virus op die rekenaar was nie
- Sy rekenaar kan besmet word deur 'n nuwe virus, wat nog nie deur die anti-virus program opgespoor kan word nie

(2)

2.3 Om ongemagtigde toegang tot 'n mens se rekenaar te verhoed(1)

2.4.1 VALS

2.4.2 VALS

2.4.3 VALS

2.4.4. WAAR

(4)

2.5 C & E

(2)

2.6 Enige twee van:
Novell Netware, Linux, Unix, Windows 2000 Server (2)
Voeg nog by...

2.7.1 In multitaakverwerking word meer as een proses gelyktydig in die rekenaar uitgevoer (2)
(Note to markers: moenie 'n punt toeken as die leerder aandui dat meer as een instruksie gelyk in die SVE verwerk word nie)

2.7.2 DOS (1)
Voeg nog by...

2.8.1 "spooler"
2.8.2 "bootstrap loader"
2.8.3 "defrag"
2.8.4 skeduleerder (4)

TOTAAL VIR VRAAG 2: [20]

VRAAG 3 BINÊRE LOGIKA

3.1 NOT, AND, OR (2)

3.2 $A + A' = 1$ (1)

3.3

$$\begin{aligned} & b(a + c) + b'c \\ & = 1(0 + 1) + 1' \cdot 1 \\ & = 1(0 + 1) + 0 \cdot 1 \\ & = 1(1) + 0 \\ & = 1 + 0 \\ & = 1 \end{aligned}$$

(3)

$$F(X, Y, Z) = X' + (YZ')$$

X	Y	Z	X'	Z'	YZ'	F
0	0	0	1	1	0	1
0	0	1	1	0	0	1
0	1	0	1	1	1	1
0	1	1	1	0	0	1
1	0	0	0	1	0	0
1	0	1	0	0	0	0
1	1	0	0	1	1	1
1	1	1	0	0	0	0

(4)

TOTAAL VIR VRAAG 3: [10]

VRAAG 4 DATA KOMMUNIKASIE

4.1.1 Kandidate kan as volg antwoord:

“Ja”; in die geval van sekere nuwe bedryfstelsels en netwerkkaartte sal 'n Plug and Play installasie plaasvind, sonder dat die gebruiker enigiets hoef te doen

OF:

“Nee”; George moet 'n drywer vir die netwerkkaart installeer

Die punt hier is om vas te stel dat die leerder weet dat 'n drywer benodig word

OF: “Nee”; George moet ook die TCP/IP stellings laat opstel.

(2)

4.1.2 Enige twee van:

- kan 'n drukker op die netwerk gebruik
- kan kommunikeer met ander op die netwerk deur boodskappe te stuur
- kan toegang kry tot leers wat op die netwerk gestoor is
- kan rugsteun-kopieë maak op 'n bediener iewers op die netwerk, in plaas daarvan om van stiffies/CD/USB Flash stasie gebruik te maak

(2)

4.2.1 TV antenna

(1)

4.2.2 Beskrywing moet twee van die volgende insluit:

- twee geleiers
- sentrale as
- insulasie tussen die twee geleiers

(2)

4.2.3 UTP

(1)

4.3 Ethernet

(1)

4.4 Een van:

- skakel seine om van digitaal na die betrokke sein wat uitgestuur moet word
- kan bepaal of daar verkeer is op die netwerk (in die geval van CSMA/CD)
- inspekteer die teken, ens, in 'n tekeraanstuur netwerk

(1)

4.5.1 permanente verbinding

(1)

4.5.2 die oplaai en aflaaï spoed is verskillend

(1)

4.5.3 TCP/IP

(1)

4.5.4 'n Protokol bevat die reëls en regulasies wat kommunikasie tussen rekenaars beheer

(2)

4.6 Vier van die volgende feite moet in die beskrywing wees:

- die eerste rekenaar wat aangeskakel word genereer 'n teken
- die teken gaan van rekenaar na rekenaar in een rigting
- 'n rekenaar wat 'n boodskap wil stuur, heg die boodskap aan die teken en merk die teken as "besig"
- elke ander rekenaar inspekteer die teken om te sien of die boodskap aan "homself" geadresseer is
- die rekenaar wat die boodskap ontvang, kopieër die boodskap en merk die teken as "beskikbaar"

(4)

4.7 Tekenaanstuur argitektuur en FDDI

(2)

4.8.1 C

4.8.2 D

4.8.3 A

4.8.4 B

(4)

4.9.1 E

4.9.2 D

4.9.3 B

4.9.4 G

4.9.5 F

4.9.6 C

4.9.7 A

(7)

TOTAAL VIR VRAAG 4: [32]

VRAAG 5

INTERNET EN NUWE TEGNOLOGIE

5.1 webblaaier

(1)

5.2 URL

(1)

5.3 onderstreepte teks op 'n webbladsy – wanneer 'n gebruiker hierop kliek, word 'n ander webbladsy gelaai

(2)

5.4 Hypertext Markup Language

(1)

5.5 Aanvaar een van die volgende as korrek:

www.sportscars.com

http://www.sportscars.com

(1)

5.6.1 VALS

5.6.2 VALS

5.6.3 VALS

5.6.4 WAAR

5.6.5 VALS

(5)

5.7 Wireless Application Protocol

(1)

5.8 Toestelle soos selfone kan nie soveel data van die Internet as 'n gewone rekenaar kan nie, as gevolg van beperkte bandwydte. WAP word gebruik om kommunikasie te beheer van webbladsye van verminderde grootte na handhoubare toestelle (2)

5.9

enige twee van:

- stylus
- "keypad"
- aanhegbare toetsbord (2)
- "touchscreen"
- stemherkennings-tegnologie

5.10 twee van:

- dra oor d.m.v. using Bluetooth
- dra oor deur infrarooi transmissie te gebruik
- dra oor m.b.v 'n serie kabel (2)
- USB kabel
- ongeleide kommunikasie (via "wireless" Internetdiensverskaffer)

5.11.1 VALS

5.11.2 WAAR

5.11.3 WAAR

5.11.4 WAAR (4)

TOTAAL VIR VRAAG 5: [22]

VRAAG 6

SOSIALE IMPLIKASIES

6.1 Enige drie van:

- Vinnig om getalle bymekaar te tel in Excel
- Vinnig om inligting te verwerk in 'n databasis
- Kan dokument maklik verander in 'n woordverwerker, sonder om alles oor te tik etc (3)

6.2 Enige twee van:

- Hulle hoef nie al die toerusting in voorraad te hou nie; kan nuwe toerusting bestel wanneer kliënte dit van hulle bestel
- Hulle kliënte-basis sluit die hele wêreld in
- As hulle 'n goeie webstelsel het, is dit vinnig om prentjies van nuwe voorraad te laai (vinniger as om voorraad op die winkelrakke uit te pak)
- Hulle besigheidsure is 24 uur per dag (2)

voeg nog by...

- 6.3.1 een van:
 spyware – steel inligting vanaf 'n mens se rekenaar (1)
 voeg nog by...
- 6.3.2 Die polisie kan vinnig inligting oor gesoekte misdadigers verkry
 Opsporingstelsel vir gesteelde voertuie.
 Voeg nog by... (1)
- 6.4.1 'n Wurm is
- 'n program
 - wat kopieë van homself skep
 - dit het nie nodig om aan 'n ander lêer te koppel nie ('n virus het dit wel nodig)
 - dit voer "malicious acts" uit op 'n mens se rekenaar
- Punte-toekenning:
 Een punt vir "nie aan 'n ander lêer koppel nie "
 Twee punte vir enige twee van die ander feite (3)
- 6.4.2 'n "Executable" virus heg homself aan *.exe of *.com lêers (1)
- 6.4.3 'n Makro virus heg homself aan program wat 'n makro taal gebruik (bv. Microsoft Word) (1)
- 6.5 Een van:
- blok 'n e-pos adres in Outlook Express
 - plaas 'n spesifieke e-pos adres in 'n spam filter (1)
- 6.6 Twee van:
- Sommige persone wat nie kan skryf nie, kan 'n rekenaar se toetsbordgebruik om teks te tik
 - 'n Paraplegiese persoon wat beperk is met rondbeweeg, kan heelwat toegang tot die buitewêreld verkry deur die gebruik van die Internet
 - Daar is spesiale toevoer-toestelle vir persone wat nie hulle hande kan gebruik nie
 add more... (2)

TOTAAL VIR VRAAG 6: [15]

VRAAG 7 TOEPASSINGSPROGRAMMATUUR EN PAKKETTE

- 7.1 Linux (1)
- 7.2 Star Office (1)
- 7.3.1 rekeningkunde program
- 7.3.2 sigblad
- 7.3.3 databasis (3)

- 7.4 Enige drie van:
gebruik inkeping
gebruik "bullets"
sit 'n bladsyraam op
sit prentjies by (3)
- 7.5.1 Insert
7.5.2 Edit (2)
- 7.6.1 Naam van funksie is verkeerd gespel
7.6.2 'n Formule of funksie kan nie die nodige berekeninge doen nie, omdat sommige van die selverwysings non-numeriese karakters bevat.
7.6.3 Die gegewe funksie of formule vereis dat daar deur 0 gedeel word. (3)
- 7.7.1 vier
7.7.2 twee
7.7.3 0
7.7.4 3 (4)
- 7.8.1 een van: text, alpha
7.8.2 4.8
7.8.3 Johannesburg (3)

TOTAAL VIR VRAAG 7: [20]

Vraag 1 Gegewe lêer EKSAMEN

REKENAARSTUDIE GRAAD 11 HG
EKSAMENINSTRUKSIES

Prosedures, Funksies, Units, Skikkings, Lêerhantering

TEORIE VRAESTEL

ONDERWERP PUNTETELLING

- | | |
|--|----|
| 1. Datavoorstelling | 10 |
| 2. Argitek tuur | 15 |
| 3. Stelselprogrammatuur | 20 |
| 4. Datakommunikasies | 25 |
| 5. Sosio-ekonomiese implikasies | 10 |
| 6. Turbo Pascal Algoritmes en Implementering | 50 |

-----Page Break-----

Prosedures
Funksies
Units
Skikkings
Lêerhantering

PRAKTIESE VRAESTEL
Ontleding van Graad 11 Rekenaarstudie punte

Question 1 Original File EXAM

COMPUTER STUDIES GRADE 11 HG
EXAMINATION INSTRUCTIONS

Procedures, Functions, Units, Arrays, File handling

THEORY PAPER

- | TOPIC | MARKS |
|---|-------|
| 1. Data representation | 10 |
| 2. Architecture | 15 |
| 3. Systems Software | 20 |
| 4. Data Communications | 25 |
| 5. Socio-economic implications | 10 |
| 6. Turbo Pascal Algorithms and Implementation | 50 |

-----Page Break-----

Procedures
Functions
Units
Arrays
File Handling

PRACTICAL PAPER
Analysis of Grade 11 Computer Studies marks

Vraag 1
(moet page border hê)
eksamennommer

REKENAARSTUDIE GRAAD 11 HG

EKSAMENINSTRUKSIES

'n Praktiese vraestel van 2½ ure en 'n Teorie vraestel van 2 ure sal geskryf word.

PRAKTIESE VRAESTEL

Prosedures, Funksies, Units, Skikkings, Lêerhantering

TEORIE VRAESTEL

	ONDERWERP	PUNTETELLING
1.	Datavoorstelling	10
2.	Argitektuur	15
3.	Stelselprogrammatuur	20
4.	Datakommunikasie	25
5.	Sosio-ekonomiese implikasies	10
6.	Turbo Pascal Algoritmes en Implementering	50
	• Prosedures	
	• Funksies	
	• Units	
	• Skikkings	
	• Lêerhantering	

Ontleding van Graad 11 Rekenaarstudie punte

<i>Teorie</i>	130
<i>Prakties</i>	70
<i>CASS</i>	100
<i>Finale Gr 11 punt</i>	<u>300</u>

vandag se datum

VRAAG 1/QUESTION 1 (Woordverwerkingslêer XSAMENXX / WP file EXAMXX)

Heading Bold, ✓	centre, ✓	insert line✓		3
EXAMINATION INSTRUCTIONS EKSAMEN INSTRUKSIES				1
Insert: A Practical...(the whole sentence)✓		2½✓		2
Move : [PRACTICAL PAPER] [PRAKTIESE VRAESTEL]✓				1
TOPIC left align✓		1.5 cm✓(not more than 0.05 cm out)		4
MARKS right align✓		13cm✓		
Architecture: Argitektuur one word✓	Datacommunications Datakommunikasies : remove s✓			2
Bullets✓(must be under the text – Turbo)		Indentation ✓		2
Analysis. Of Grade 11/ Ontleding van graad 11 Font size - 14✓				1
Table Insert ✓ Arial 14pt✓	Italic ✓	Marks / Punte right align✓	<u>300</u> underline✓	5
Header : examination number / eksamennommer✓				4
Footer: current date✓✓		right align✓		
margins : R + L 3 cm✓✓	T + B 2 cm✓✓			4
Line spacing 1.5✓✓ (the whole document)				2
Page border✓✓				2
Remove page break✓ (totally)				1
TOTAL				34

Question 1

(must have a page border)
examination number

COMPUTER STUDIES GRADE 11 HG

EXAMINATION INSTRUCTIONS

A Practical paper of 2½ hours and a Theory paper of 2 hours will be written.

PRACTICAL PAPER

Procedures, Functions, Units, Arrays, File handling

THEORY PAPER

	TOPICS	MARKS
1.	Data representation	10
2.	Architecture	15
3.	Systems Software	20
4.	Data Communication	25
5.	Socio-economic implications	10
6.	Turbo Pascal Algorithms and Implementation	50
	<ul style="list-style-type: none">• Procedures• Functions• Units• Arrays• File Handling	

Analysis of Grade 11 Computer Studies marks

<i>Theory</i>	130
<i>Practical</i>	70
<i>CASS</i>	100
<i>Final Gr 11 mark</i>	<u>300</u>

Vraag 2 Gegewe lêer STAL.TXT

- 1 Hot dogs
- 2 Groenmielies
- 3 Lekkers
- 4 Koeldrank
- 5 Tombola
- 6 Hamburgers
- 7 Boerewors
- 8 Potato sticks
- 9 Springmielies
- 10 Roomys
- 11 Biltong
- 12 Pannekoek
- 13 Skyfskiet
- 14 Vetkoek
- 15 Vrugtesap

Question 2 File given STALL.TXT

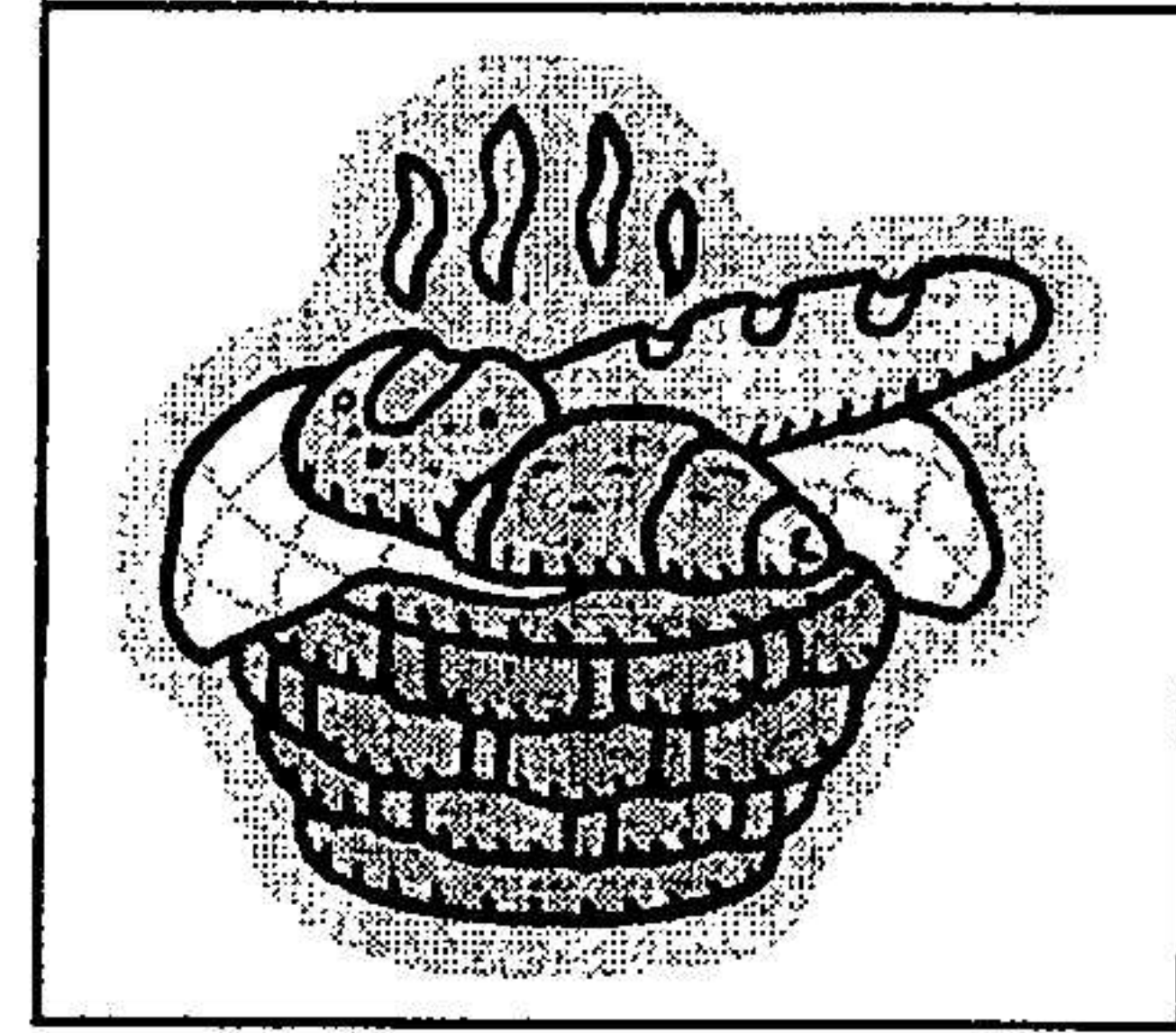
- 1 Hot dogs
- 2 Groenmielies
- 3 Sweets
- 4 Cold drinks
- 5 Tombola
- 6 Hamburgers
- 7 Boerewors
- 8 Potato sticks
- 9 Pop Corn
- 10 Ice cream
- 11 Biltong
- 12 Pannekoek
- 13 Target shooting
- 14 Vetkoek
- 15 Fruit juice

VRAAG 2/QUESTION 2 (Wverwerkingsdokument: ENTREPXX / WP file ENTREPXX)

Insert picture ✓(any picture)	1
Information: date, stalls, number, venue, time, kontakt number datum, stalletjies, nommers, plek, tyd. kontaknommer ✓✓✓ -1 per error	3
Font size✓, font type✓, Wordart✓, Align✓, Colour ✓	5
A5✓	1
TOTAL	10

VRAAG 2

Entrepreneursdag



20 November 9:00 – 11:00
Hoërskool Piet Malan

Kom ondersteun ons by die volgende stalletjies:

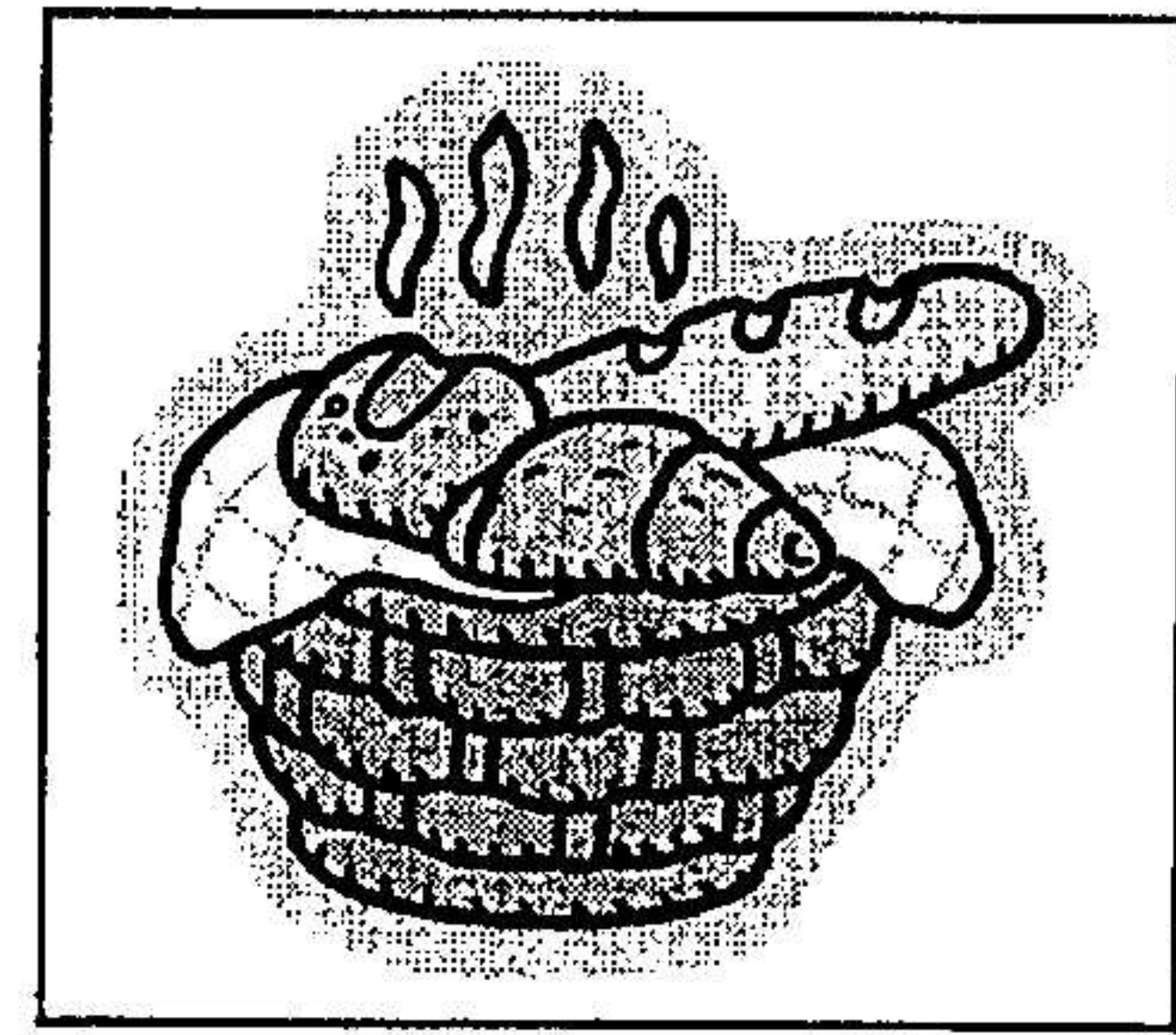
Stalletjienommer Tipe

1	Hot dogs
2	Groenmielies
3	Lekkers
4	Koeldrank
5	Tombola
6	Hamburgers
7	Boerewors
8	Potato sticks
9	Springmielies
10	Roomys
11	Biltong
12	Pannekoek
13	Skyfskiet
14	Vetkoek
15	Vrugtesap

Skakel 011 642 3334 vir verdere navrae

QUESTION 2

Entrepreneur Day



20 November 9:00 – 11:00
High School Piet Malan

Come and support us at the following stalls:

Stall number Type

- | | |
|----|-----------------|
| 1 | Hot dogs |
| 2 | Groenmielies |
| 3 | Sweets |
| 4 | Cold drinks |
| 5 | Tombola |
| 6 | Hamburgers |
| 7 | Boerewors |
| 8 | Potato sticks |
| 9 | Pop Corn |
| 10 | Ice cream |
| 11 | Biltong |
| 12 | Pannekoek |
| 13 | Target shooting |
| 14 | Vetkoek |
| 15 | Fruit juice |

Phone 011 642 3334 for more information

Vraag 3 Gegewe lêer PUNTE

NAAM	CASS	TERMYN 1	TERMYN 2	TERMYN 3	JAARPUNT
Botha G	80	55	53	54	
Coetzee H	70	74	65	68	
Dunn F	60	71	65	54	
Hall I	74	54	55	58	
Jones Y	80	75	64	39	
Naidoo E	71	80	75	65	
Opperman J	68	65	61	58	
Mogale R	91	85	88	82	
Palmer S	62	65	63	61	
Ping J	64	68	58	51	
Strydom J	65	70	75	40	
Taute K	66	71	62	61	
West L	80	85	74	86	
Alberts B	90	95	86	86	
Els J	66	62	56	58	
Lohse V	74	80	77	71	
Gray H	62	58	69	60	
Ruka S	87	85	86	85	

Vraag 3

eksamennummer

BIOLOGIE /BIOLOGY GRAAD 11 /GRADE 11						
NAAM NAME	CASS	TERMYN 1 TERM 1	TERMYN 2 TERM 2	TERMYN 3 TERM 3	JAARPUNT YEAR MARK	SIMBOOL SYMBOL
Alberts B	90	95	86	86	89.3	A
Botha G	80	55	53	54	60.5	C
Coetzee H	70	74	65	68	69.3	C
Dunn F	60	71	65	54	62.5	C
Els J	66	62	56	58	60.5	C
Gray H	62	58	69	60	62.3	C
Hall I	74	54	55	58	60.3	C
Jones Y	80	75	64	39	64.5	C
Lohse V	74	80	77	71	75.5	B
Mogale R	91	85	88	82	86.5	A
Naidoo E	71	80	75	65	72.8	B
Opperman J	68	65	61	58	63.0	C
Palmer S	62	65	63	61	62.8	C
Ping J	64	68	58	51	60.3	C
Ruka S	87	85	86	85	85.8	A
Strydom J	65	70	75	40	62.5	C
Taute K	66	71	62	61	65.0	C
West L	80	85	74	86	81.3	A
GEMIDDELD AVERAGE	72.78	72.11	68.44	63.17	69.13	
HOOGSTE JAARPUNT HIGHEST YEAR MARK					89.3	
TWEEDE HOOGSTE JAARPUNT SECOND HIGHEST YEAR MARK					86.5	
TOTAAL AANTAL LEERDERS TOTAL NUMBER OF LEARNERS					18	

datum/date

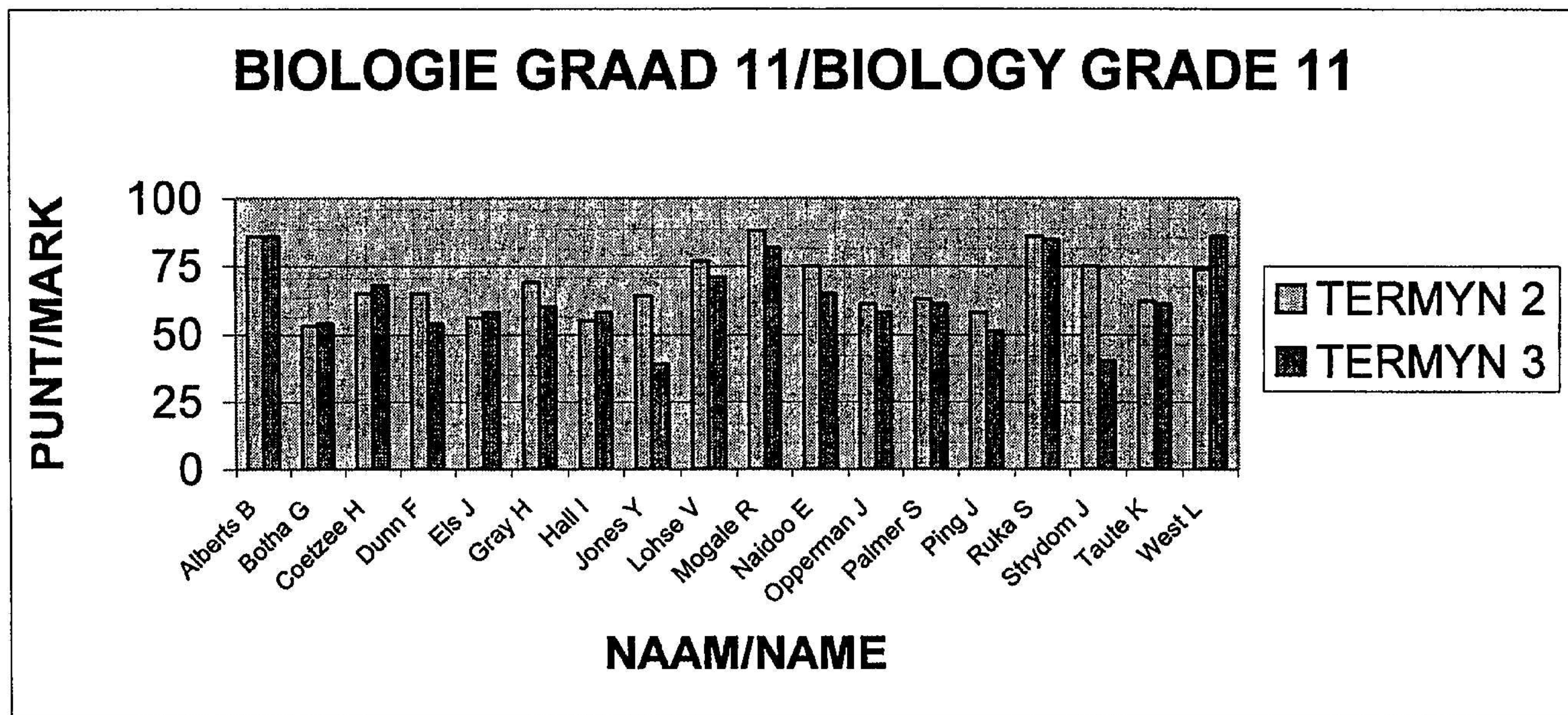
VRAAG 3/QUESTION 3: (Sigbladlêer PUNTEXX) (Spreadsheet file MARKSXX)

Columns legible ✓	headings bold ✓,	double ✓ frame ✓	4
Heading ✓ bigger font size ✓ centre ✓ text wrap ✓			4
Sort alphabetically ✓	All columns sorted ✓		2
Column F :=Average ✓(B3 :E3) ✓	1dec ✓		3
Average: = Average ✓ (B3:B20) ✓	4 columns ✓		3
Highest: MAX ✓(F3:F20) ✓	} -1 if not only in column F		2
2 nd highest: LARGE ✓ (F3:F20,2) ✓			2
Number of learners: COUNT ✓ (F3:F20) ✓ (any column, not only F; COUNTA for column A)			2
Column G : =IF ✓F3>79 ✓,"A" ✓,IF ✓ (F3>69 ✓,"B" ✓,"C" ✓))			7
Footer ✓ : =NOW() or DATE() or [Date] ✓	centre ✓		3
Header : examination number ✓			1
TOTAL:			33

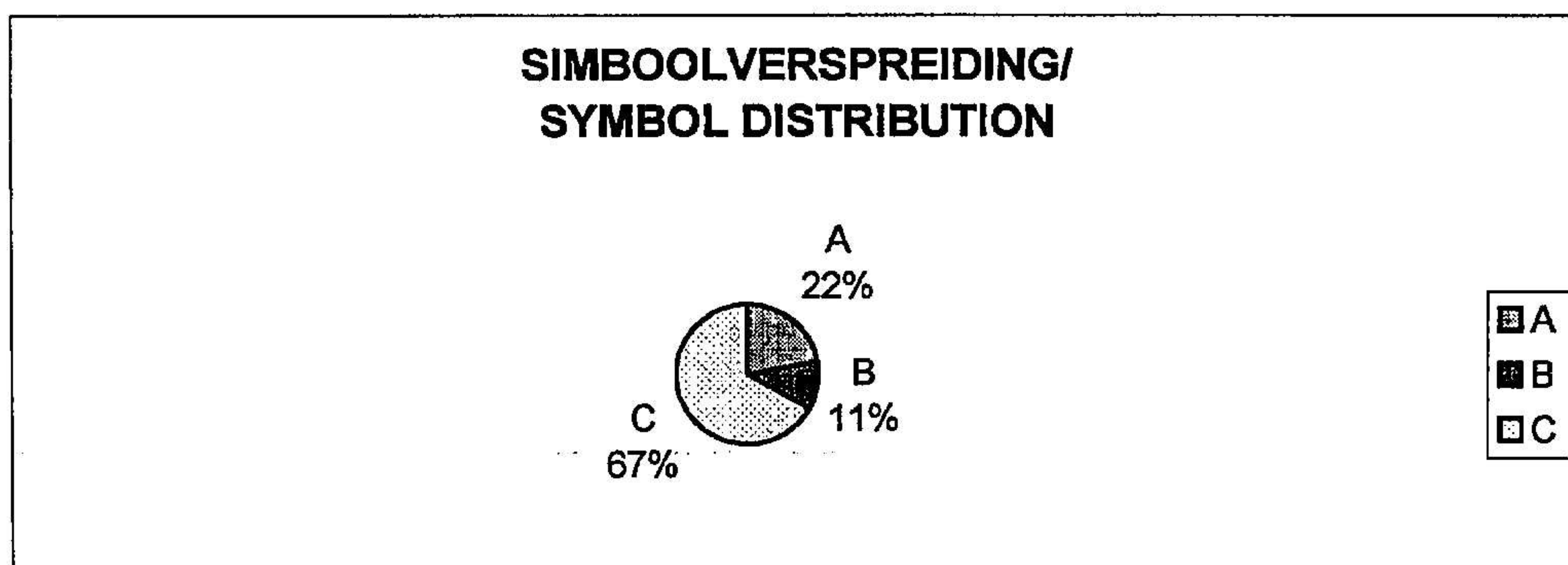
NAAM	CASS	TERMYN 1	TERMYN 2	TERMYN 3	JAARPUNT	SIMBOOL	
Alberts B	90	95	86	86	=AVERAGE(B3:E3)	=IF(F3>79,"A",IF(F3>69,"B","C"))	
Botha G	80	55	53	54	=AVERAGE(B4:E4)	=IF(F4>79,"A",IF(F4>69,"B","C"))	
Coetzee H	70	74	65	68	=AVERAGE(B5:E5)	=IF(F5>79,"A",IF(F5>69,"B","C"))	
Dunn F	60	71	65	54	=AVERAGE(B6:E6)	=IF(F6>79,"A",IF(F6>69,"B","C"))	
Els J	66	62	56	58	=AVERAGE(B7:E7)	=IF(F7>79,"A",IF(F7>69,"B","C"))	
Gray H	62	58	69	60	=AVERAGE(B8:E8)	=IF(F8>79,"A",IF(F8>69,"B","C"))	
Hall I	74	54	55	58	=AVERAGE(B9:E9)	=IF(F9>79,"A",IF(F9>69,"B","C"))	
Jones Y	80	75	64	39	=AVERAGE(B10:E10)	=IF(F10>79,"A",IF(F10>69,"B","C"))	
.....							
		=AVERAGE	=AVERAG	=AVERAG	=AVERAGE		
GEMIDDELD (B3:B20)		E(C3:C20)	E(D3:D20)	(E3:E20)	=AVERAGE(F3:F20)		
HOOGSTE JAARPUNT						=MAX(F3:F20)	
TWEEDE HOOGSTE JAARPUNT						=LARGE(F3:F20,2)	
TOTALE AANTAL LEERDERS						=COUNT(F3:F20)	

examination number

Vraag 4.1/Question 4.1



Vraag 4.3

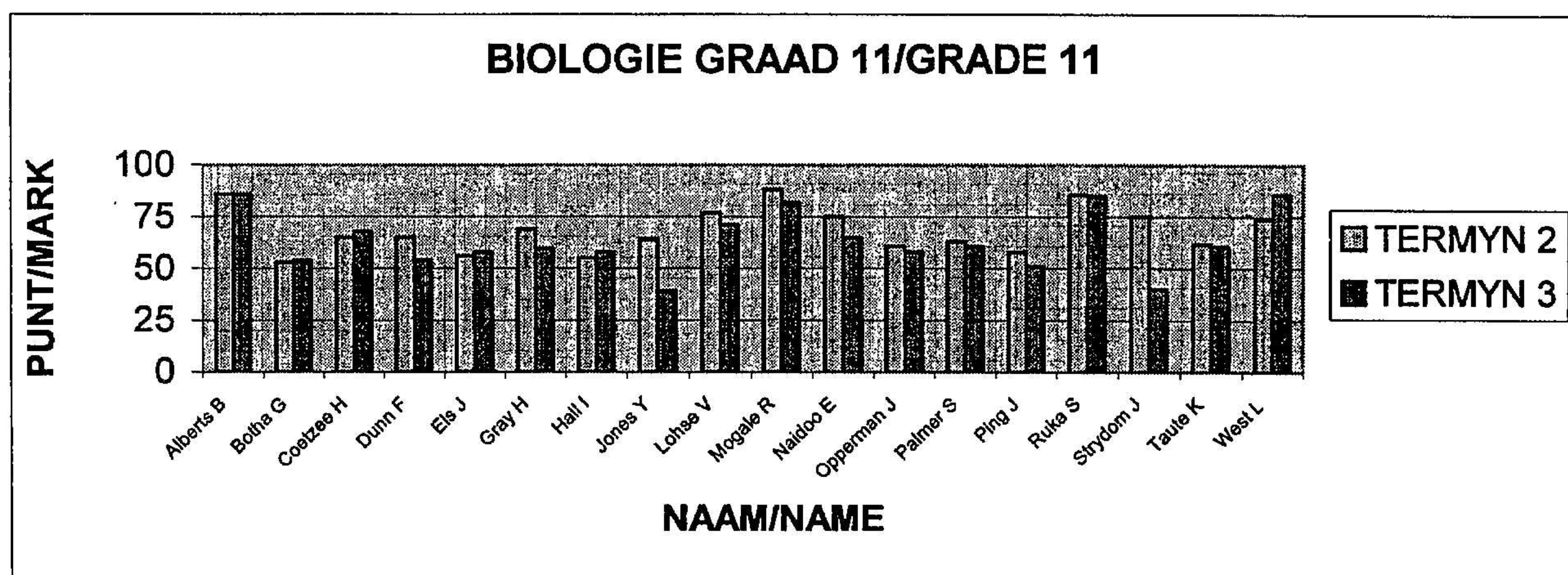


VRAAG 4/QUESTION 4 (Spreadsheet file MARKSXX / Sigbladiêr PUNTEXX)

Balkgrafiek ✓	Termyn 2 + 3 ✓	2
Heading: BIOLOGY.. ✓	X as: NAME ✓ Y axis: MARK ✓	5
Scale: 25 ✓	Series ✓	
Pie Chart ✓ correct data ✓		2
Heading: SYMBOL DISTRIBUTION (SIMBOOLVERSPREIDING) ✓ Show: % ✓ symbols (legend or label) ✓		3
TOTAL:		12

Vraag 4.2/Question 4.2

**VERSLAG VAN BIOLOGIEPUNTE VIR TERMYNE 2 EN 3 /BIOLOGY MARKS
REPORT FOR TERMS 2 AND 3**



VRAAG 4.2/QUESTION 4.2 (Woordverwerkingsdokument: BIOLXX / WP file BIOLXX)

Graph ✓✓	2
Heading: REPORT/VERSLAG..✓ Full A4✓ Landscape ✓ Header: Examination number✓	4
TOTAL	6

Vraag 5

GRAAD 11 JAARPUNTE/
GRADE 11 YEAR MARKS

NAAM Name	CASS	TERMYN 1 Term 1	TERMYN 2 Term 2	TERMYN 3 Term 3	NUWE JAARPUNT New Year mark
Alberts B	90	95	86	86	90
Botha G	80	55	53	54	67
Coetzee H	70	74	65	68	70
Dunn F	60	71	65	54	62
Els J	66	62	56	58	62
Gray H	62	58	69	60	62
Hall I	74	54	55	58	65
Jones Y	80	75	64	39	70
Lohse V	74	80	77	71	75
Mogale R	91	85	88	82	88
Naidoo E	71	80	75	65	72
Opperman J	68	65	61	58	65
Palmer S	62	65	63	61	63
Ping J	64	68	58	51	62
Ruka S	87	85	86	85	86
Strydom J	65	70	75	40	63
Taute K	66	71	62	61	65
West L	80	85	74	86	81

Formule vir kolom F/FORMULA FOR COLUMN F: $= (B3 + \text{average}(c3:e3)) / 2$

QUESTION 5 (Spreadsheet file **MARKSXX**, sheet **NEW/**
Sigbladlêer **PUNTEXX**, sheet **NUWE**)

Create (-1 per error : separate spreadsheet, wrong/extra columns) ✓	2
Label new sheet as NEW (NUWE)	
Heading: GRADE 11..✓	1
COLUMN F: $= (B3 + \text{average}(c3:e3)) / 2$; ✓; -1 if not rounded off	3
TOTAL:	6

Vraag 6 Gegewe lêer

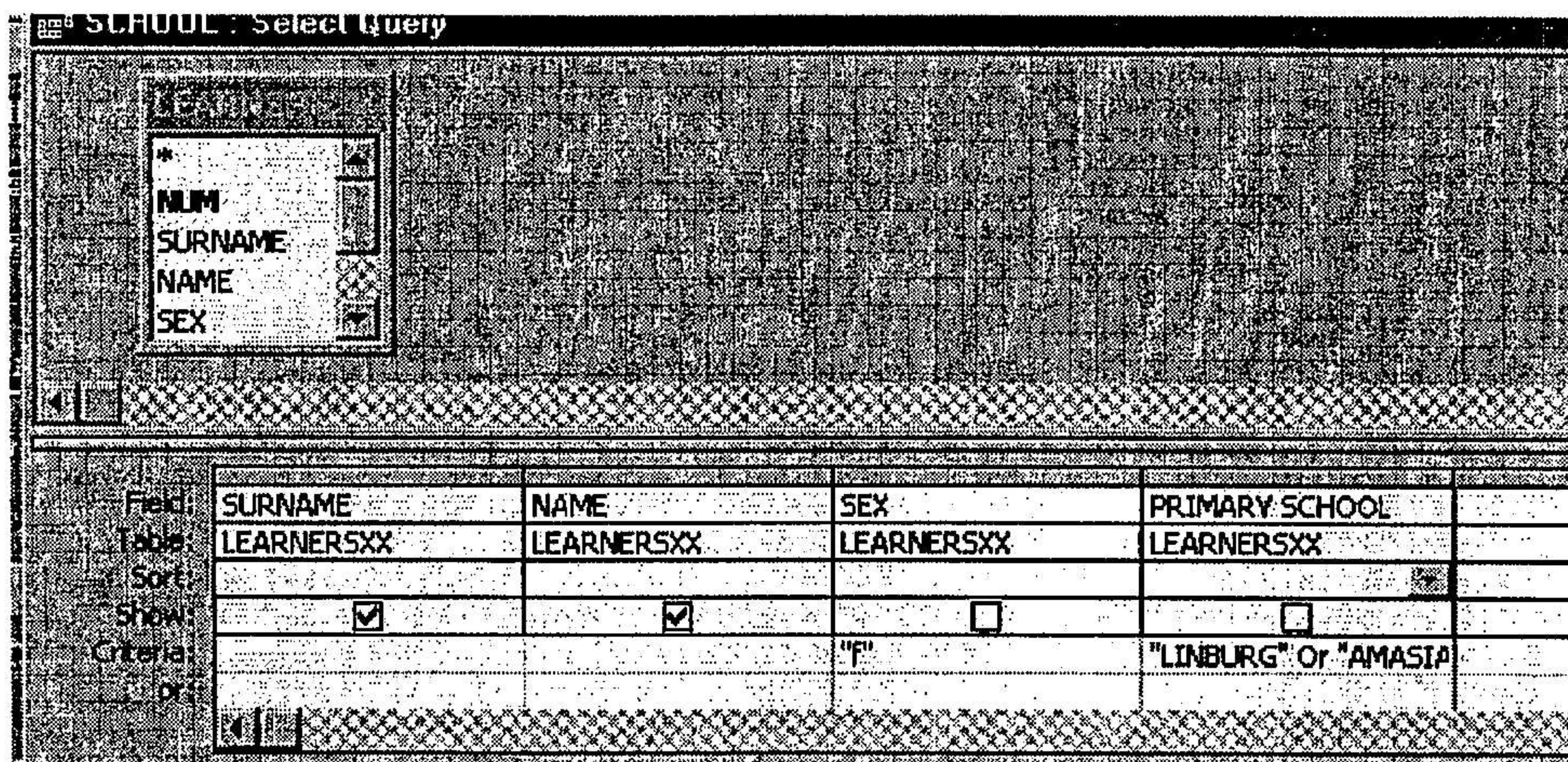
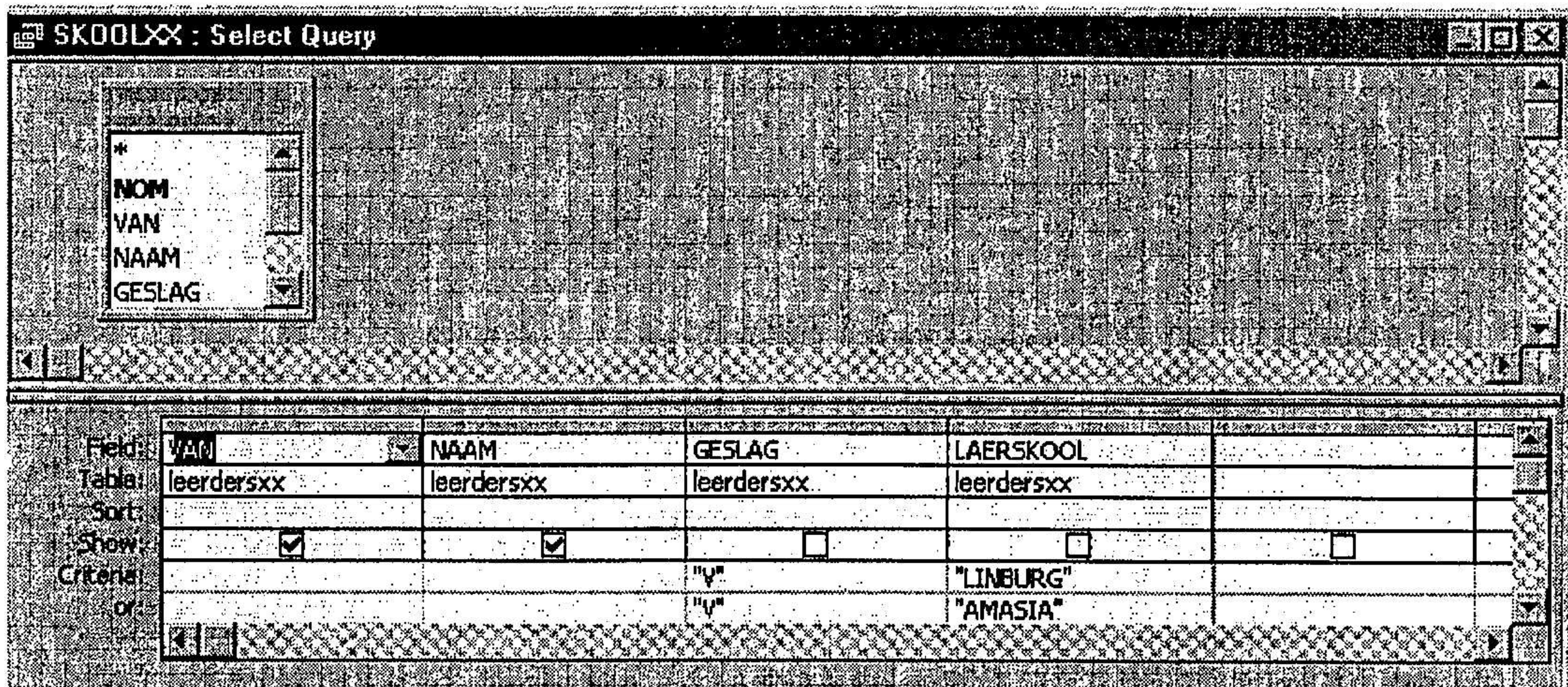
VAN SURNAME	NAAM NAME	GESLAG SEX	LAERSKOO PRIMARY SCHOOL	REGISTRASIEGELD REGISTRATION FEE
MOOLMAN	JOHAN	M	LINBURG	400
JACOBZ	HENRY	M	AMASIA	400
HOLMES	JANE	V	LINBURG	200
WILLS	SHANE	M	LOWPARK	300
JONES	MARY	V	AMASIA	400
BELL	GRAHAM	M	LINBURG	300
CALITZ	LEIGH	V	AMASIA	400
OPPERMAN	STEFAN	M	LOWPARK	0
VAN DER WESTHUIZEN	JOHAN	M	LINBURG	300
JONES	ANNE	V	AMASIA	400

VRAAG 6

NUM	SURNAME	NAME	SEX	PRIMARY SCHOOL	REGISTRATION FEE	DATE OF BIRTH
NOM	VAN	NAAM	GESLAG	LAERSKOO	REGISTRASIEGELD	GEBORTE DATUM
6	BELL	GRAHAM	M	LINBURG	R 300.00	91/12/30
7	CALITZ	LEIGH	V	AMASIA	R 400.00	90/07/14
3	HOLMES	JANE	V	LINBURG	R 200.00	90/11/11
2	JACOBZ	HENRY	M	AMASIA	R 400.00	89/01/29
9	JANSEN	SUSAN	V	LINBURG	R 200.00	90/11/23
12	JONES	ANNE	V	LINBURG	R 400.00	90/09/09
5	JONES	MARY	V	AMASIA	R 400.00	90/10/01
1	MOOLMAN	JOHAN	M	LINBURG	R 400.00	90/10/28
8	SMITH	ANDREW	M	LOWPARK	R 400.00	90/04/30
11	VAN DER WESTHUIZEN	JOHAN	M	AMASIA	R 300.00	90/11/21
4	WILLS	SHANE	M	LOWPARK	R 300.00	90/03/12

enige geboortedatum/any date of birth

VRAAG 6.10 QUERY



VAN/SURNAME	NAAM/NAME
HOLMES	JANE
JONES	MARY
CALITZ	LEIGH
JANSEN	SUSAN
JONES	ANNE

VRAAG 6.11

Report Header									
GRADE 8 LEARNERS									
Page Header									
SEX	SURNAME	NAME	PRIMARY	SCHOOL					
SEX Header									
SEX									
Detail									
	SURNAME	NAME	PRIMARY	SCHOOL					
SEX Footer									
TOTAL:	=Count(SURNAME))								
.....									
Page Footer									
EXAMINATION NUMBER	="Page " & [Page] & " of " & [Pages]								
Report Footer									

GRAAD 8 LEERDERS			
GRAAD 8 LEERDERS			
GESLAG	VAN	NAAM	LAERSKOOL
M			
	BELL	GRAHAM	LINBURG
	JACOBZ	HENRY	AMASIA
	MOOLMAN	IOHAN	LINBURG
	SMITH	ANDREW	LOWPARK
	VAN DER WESTHUIZEN	IOHAN	AMASIA
	WILLS	SHANE	LOWPARK
Aantal:			6

GRAAD 8 LEERDERS			
GESLAG	VAN	NAAM	LAERSKOOL
V			
	CALITZ	LEIGH	AMASIA
	HOLMES	JANE	LINBURG
	JANSEN	SUSAN	LINBURG
	JONES	ANNE	LINBURG
	JONES	MARY	AMASIA
Aantal:			5

GRADE 8 LEARNERS

SEX	SURNAME	NAME	PRIMARY SCHOOL
F	JANSEN	SUSAN	LINBURG
	JONES	ANNE	LINBURG
	CALITZ	LEIGH	AMASIA
	JONES	MARY	AMASIA
	HOLMES	JANE	LINBURG
TOTAL:			5

SEX	SURNAME	NAME	PRIMARY SCHOOL
M	SMITH	ANDREW	LOWPARK
	VAN DER WESTHUIZEN	JOHAN	AMASIA
	BELL	GRAHAM	LINBURG
	WILLS	SHANE	LOWPARK
	JACOBZ	HENRY	AMASIA
	MOOLMAN	JOHAN	LINBURG
TOTAL:			6

VRAAG 6.12 QUERY

VAN/SURNAME	NAAM/NAME	BEDRAG VERSKULDIG/ AMOUNT OWED
MOOLMAN	JOHAN	R 0.00
JACOBZ	HENRY	R 0.00
HOLMES	JANE	R 200.00
WILLS	SHANE	R 100.00
JONES	MARY	R 0.00
BELL	GRAHAM	R 100.00
CALITZ	LEIGH	R 0.00
SMITH	ANDREW	R 0.00
JANSEN	SUSAN	R 200.00
VAN DER WESTHUIZEN	JOHAN	R 100.00
JONES	ANNE	R 0.00

QUESTION 6/VRAAG 6 (Database file GRADE8/Databasislêer GRAAD8)

TABEL LEERDERS..		
Rename Table: LEARNERSXX✓/LEERDERSXX	1	
Add: SMITH,JANSEN✓✓	2	
Primary key✓✓	2	
REGISTRATION: Currency✓✓	2	
DATE OF BIRTH: Type DATE✓Type data✓	2	
Delete OPPERMAN✓ If more fields deleted no marks	1	
SEX: Validation test M OR F✓✓ (M or V) Text message ✓✓	4	
QUERY SCHOOL..		
Sort alphabetically✓✓	2	
SEX = F ✓AND✓ SCHOOL = LINBURG✓ OR✓ SEX = F AND SCHOOL = AMASIA✓	5	
OR LINBURG OR AMASIA AND SEX = F		
Columns: SURNAME, NAME✓✓-1 for extra fields	2	
QUERY REGIS..		
Column heading: AMOUNT OWING✓	1	
AMOUNT OWING: ✓ 400-✓ [REGISTRATION] ✓	3	
Display: SURNAME , NAME	1	
Report GROUPS..		
Heading: GRADE 8 LEARNERS✓,centre✓	2	
Columns: SURNAME, NAME, SEX, PRIMARY SCHOOL✓✓ - -1 for extra fields. (order of fields not important)	2	
Group by sex✓✓ Separate pages✓✓	4	
Formula =COUNTA([VAN])✓ , Count by group (separate) ✓ Caption ✓	3	
Page footer: Examination number	1	
TOTAL :	40	

VRAAG 7

=INT(((\$E\$1 - C3)/365)

**GRAAD 8 SEUN/ GRADE 8
BOYS****05/01/01**

VAN/SURNAME	NAAM/ NAME	GEB DATUM /DATE of BIRT	OUDERD/ AGE
VAN DER WESTHUI	JOHAN	90/11/21	14
SMITH	ANDREW	90/04/30	14
BELL	GRAHAM	91/12/30	13
WILLS	SHANE	90/03/12	14
JACOBZ	HENRY	89/01/29	15
MOOLMAN	JOHAN	90/10/28	14

QUESTION 7/VRAAG 7 (Spreadsheet BOYSXX / Sigblad SEUNSXX)

Heading: GRADE 8 BOYS ✓ SURNAME , NAME , BIRTHDATE ✓	2
Copy data correct (-1 per error : wrong record; wrong column; extra column)	3
E1: 05/01/01 (type YY/MM/DD) ✓	1
Column D: = INT ✓ ((\$E\$ - C3) ✓ /365) ✓	3
TOTAL:	9

GRAND TOTAL / GROOTTOTAAL: 150