

POSSIBLE ANSWERS FOR:

REKENAARSTUDIE SG V 2 / COMPUTER STUDIES SG P 2

VRAAG 1 / QUESTION 1 [35]

- | | | | | | |
|-----|-----|-----|-------------------|-------|------|
| 1.1 | 1. | F ✓ | Intel Pentium 733 | A. 2 | |
| | 2. | A ✓ | 8 MB AGP | B. 5 | |
| | 3. | G ✓ | 108 Windows 98 | C. 6 | |
| | 4. | H ✓ | Windows 2000 | D. 7 | |
| | 5. | B ✓ | Mini 230 watt | E. 8 | |
| | 6. | C ✓ | 14" Super VGA | F. 1 | (10) |
| | 7. | D ✓ | 52 speed CD | G. 3 | |
| | 8. | E ✓ | 10 GB Western ... | H. 4 | |
| | 9. | K ✓ | 32 MB | I. 10 | |
| | 10. | I ✓ | On board 2 x h... | K. 9 | |
- 1.2.1 a) Dit is 'n metode van verwerking waar die verwerker in staat is om nuwe instruksies van die geheue te lees ✓ voordat die instruksie wat dit besig is om te vewerk, heeltemal klaar verwerk is. ✓ OR Diagram OF
Gelyktydige verwerking van instruksies
Verskillende stadiums van voltooiing is.
*It is a method of processing whereby the processor can read new instructions into the memory ✓ before it is finished processing the instruction it is currently busy processing. ✓ OR Diagram OR
Simultaneously processing
Instructions at different stages of completion* (2)
- b) Kasgeheue komplimenteer die krag van die verwerker deurdat dit veroorsaak dat kommunikasie tussen die moederbord en verwerker vinniger plaasvind. ✓ OR een van
 - hoëspoed geheue
 - geheue wat gereserveer word vir die tydelike stoor van data en instruksies wat die waarskynlikste kans het om volgende deur die verwerker gebruik wordVlak 1: kasgeheue is op die verwerker self ingebou. ✓
*Cache memory compliments the power of the processor by causing faster communication between the motherboard and the processor. ✓ OR any one of
 - high-speed memory
 - reserved for the temporary storage of data or instructions likely to be needed next by theLevel1: cache memory is built into the processor itself. . ✓* (2)
- c) Instruksies wat AMD by hulle verwerkers bygevoeg het ✓ OR wat die aanbied van 3D-grafiese/grafika/multimedia omgewings verbeter.
Instructions which AMD added to their processors ✓ OR which improves the presentation of 3-D graphics/graphics/multimedia environments. (1)

- d) Multimedia – gebruik maak van meer as een tipe medium soos video, klank, grafika. ✓✓ / video en klank (2)
Multimedia – using more than one type medium like video, sound, graphics. ✓✓ / video and sound
- e) Die stelselklok reguleer die klokspoed van die aktiwiteite op die moederbord. OR
 • Die klokpulse laat data teen 'n vaste tempo op die moederbord beweeg
 • Kwartskristal wat vibreer teen 'n vaste tempo
 • Die spoed van die stelselklok word gemeet in MHz (1)
Enige korrekte feit. ✓ / Any correct fact. ✓
The system clock regulates the clock speed of activities on the motherboard. OR
 • *The clock pulses causes data to move at a constant rate on the motherboard.*
 • *Quartz crystal that vibrates at a set speed*
 • *The speed of the system clock is measured in Megahertz (MHz)*
- 1.2.2 Die spoed waarteen instruksies in die busse beweeg. ✓ / data-oordragspoed(1)
The speed instructions move in the busses. ✓ / data transfer rate. (1)
- 1.2.3 INTEL ✓ / CYRIX / TRANSMETA / MOTOROLA (1)
- 1.3 Bus – drade/kommunikasie kanale waarin data versend word op die moederbord. ✓
 Bis – elektronie komponent wat een van twee toestande kan wees nl. 1 of 0(aan of af). ✓ (2)
Bus – wires/ communication channels wherein data is sent on the motherboard. ✓
Bit – electronic component that can be in one of two states namely 1 or 0 (on or off). ✓
- 1.4. Klokvermenigvuldiging is wanneer die SVE teen 'n baie hoër spoed verwerking doen as waarteen die stelselklok loop. ✓ OF Dit word gebruik om vinniger verwerking te laat plaasvind aangesien die verwerker se spoed baie vinniger is as die stelselklok sin.
NB! verskillende spoed / different speed
Clock multiplication is when the CPU does processing at a much higher speed ✓ than what the system clock runs. ✓ OR It is used to allow faster processing to happen as the processor speed is much faster than the system clock speed. (2)
- 1.5 a) Hoe groter die adresbus hoe meer geheue kan geadresseer word. ✓
The larger the address bus, the more memory can be addressed. ✓ (1)

b) Hoe groter die databus hoe vinniger kan die verwerker verwerk omdat meer data en instruksies vervoer word. ✓ (1)

The larger the address bus, the faster the processor can subtract because more data and instructions can be transported.

✓

1.6 ISA✓, PCI✓ en/and AGP✓ (3)

1.7.1 RAM is geheue vir die stoor van instruksies en data waarmee die rekenaar tans besig is. ✓ OF tydelike geheue / krag afgaan verloor data

ROM – programme(BIOS) wat help om die rekenaar aan die gang te kry word hierin gestoor. ✓ OF permanent / behou data as die krag afgaan

(2)

RAM is memory for saving the instructions and data the computer is currently busy using. ✓

OR temporary memory / loose content when power is turned off

ROM – programs (BIOS) helps to start up the computer is stored herein

OR permanently / holds its content when the power is off ✓

1.7.2 'n SIMM bestaan uit 'n aantal DRAM vlokkies wat op 'n stroombaankaart aangebring is, wat dan in die SIMM-gleuwe van die moederbord pas. ✓ By DIMM's is geheuevlokkies aan beide kante van die stroombaankaart. ✓ / meer geheue

A SIMM consists of a number of DRAM chips on a printed circuit board, which fits in the SIMM sockets of the motherboard. . ✓ In the case of DIMM's, the memory chips are located on both sides of the printed circuit board. ✓ / more memory

(2)

1.7.3 Primêre geheue word gebruik om die bedryfstelsel, programinstruksies en data te stoor wat in gebruik is wanneer die rekenaar aan is ✓

/ RAM / tydelike stoor

terwyl sekondêre geheue permanente storing van data en instruksies is OF stoor op hardeskyf of CD. ✓

(2)

Primary memory is used to store the operating system, program instructions and data which is in use while the computer is on, ✓

OR RAM / temporarily

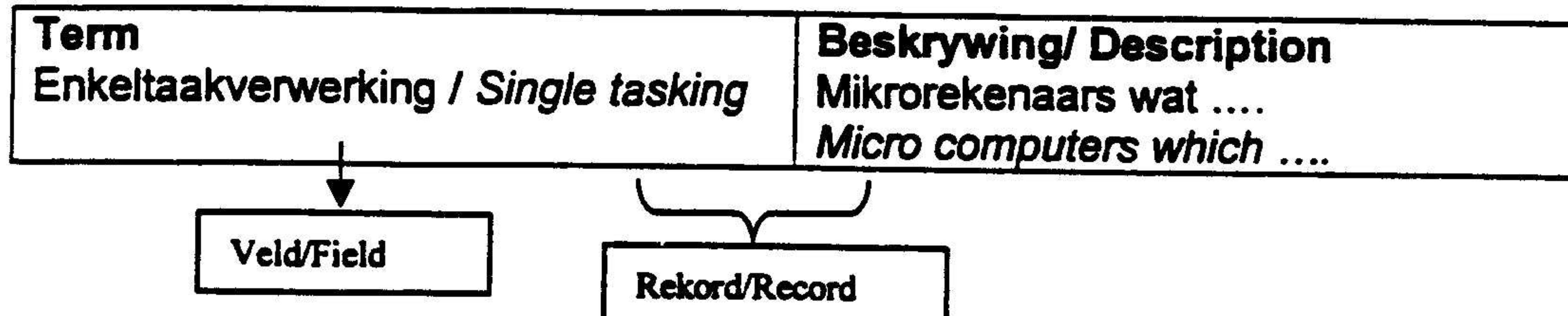
while the secondary memory is used for the permanent storage of data

OR storage of data on hard disk or CD. ✓

VRAAG 2 / QUESTION 2 [30]

- 2.1.1 Teks / Karakters / String / Alfa-numerries ✓
 Text / Character / String / Alpha numeric ✓ (1)
- 2.1.2 'n Veld is 'n enkele item bv. Enkeltaakverwerking ✓ . 'n Rekord is 'n versameling velde bv. Enkeltaakverwerking en die beskrywing. ✓
Moet 'n voorbeeld gee / Must give an example
 A field is an single item e.g. Single task processing. ✓ . A record is a group of fields e.g. single task processing and the description. ✓ (2)

OF/OR



- 2.1.3 A. wat verniet van die Internet afgelaai kan word / goedkoop / netwerke / LANs / wat vir Windows groot kompetisie gee
Enige korrekte feit / Any correct fact ✓ (1)
 which can be downloaded from the Internet for free / cheap / networks / LANs / which gives tremendous competition to Windows
- B. Windows 98/2000 ✓ (1)
- C. Windows NT/98 ✓ (1)
- D. bediener / netwerk server / network ✓ (1)
- E. Dit kom voor asof die bedryfstelsel meer as een taak op dieselfde tyd uitvoer. ✓ OF voorbeeld (1)
Appears to work on more than one task at the same time. ✓ OR an example
- F. Vir netwerke(LAN's) ontwikkel is. ✓
Developed for networks(LANs) workstations ✓ (1)
- G. Geheue-toekenning / Memory management✓
 Prosesbeheer / Process management ✓ t
 Bestuur toevloer- en afvoertoestelle
Manage dev. I/O ✓
 Bestuur toevloer en afvoer van lêers
Manage file input and output ✓ OF/OR (4)
 Voorsien 'n koppelvlak tussen die gebruiker en kern/bedryfstelsel
Provides an interface between the user and the operating system/kernel
- Nie doelwitte nie / Not goals
- 2.1.4 Windows 95/98, Windows ME, Windows 2000, Windows NT Server, ✓ ✓ (OR Window NT Workstation)
 OR fields that start with Windows / OF velde wat begin met Windows (2)
 Trek een punt af vir elkeen wat nie voorkom nie. Maximum 2 af.
 Subtract one mark for each wrong answer. Maximum 2 subtracted.

- 2.1.5 * Netwerkbedryfstelsel * - onttrek rekords waarin die woord Netwerkbedryfstelsel voorkom.
Network operating system- finds records where the words "Network operating system" occurs* (2)
 Netwerkbedryfstelsel * - onttrek rekords waarmee die Beskrywing begin met Netwerkbedryfstelsels.
Network operating system - finds records where the description starts with "Network operating systems"* ✓
- 2.1.6 MS DOS, Windows XP, Windows CE/3.1, OS/2, Linux, Unix ✓ (1)
Enige een. / Any one.
- 2.2.1 Wanneer 'n mens wil sien watter gedeelte elke item van 'n geheel uitmaak ✓ bv. die persentasie persone wat sekere bedryfstelsels gebruik. ✓
If one wants to see which part of the total each item presents ✓. E.g. the percentage persons who uses certain operating systems. ✓
OR To see what part of Drive C is used and what part is free
- 2.2.2 A ✓ (1)
- 2.2.3 Wanneer 'n rekenaar stadig is of nie goed funksioneer nie.
 Wanneer die hardeskyf vol is en jy wil onnodige lêers verwijder.
If a computer is slow or if it does not function well.
If a hard disk is full and you want to remove unnecessary files.
Enige een / Any one ✓ (1)
- 2.2.4 Lêers te kopieer na 'n ander lêergids
 Lêers verwijder.
 'n Nuwe lêer gids skep.
 Om te sien wat is alles op jou rekenaar
Enige 2 / Any 2 ✓
Copy files to a folder
Delete files
Create a new folder
To see what is on your computer
- 2.3.1 A. iets – dit moet 'n program wees. OF Enige iets is ook nie beskrywend nie. ✓
Something – it must be a program. OR Anything is also not descriptive.
 B. iets – dit moet program wees. ✓ OF "Crash" – 'n rekenaarvirus sal dit nie noodwendig laat gebeur nie.
Something – it must be a program. OR Crash – a computer virus will not necessarily cause it to happen.
 C. Data word nie noodwendig verwijder nie. ✓ OF iets – dit moet wees program.
Data is not necessarily being removed OR Something – it must be program.
 E. 'n Rekenaar breek nie noodwendig nie. ✓
A computer does not necessarily break. (4)
- 2.3.2 C ✓, E. ✓ OR / OF D (2)

VRAAG 3 / QUESTION 3 [35]

- 3.1 A Asynchrone**
Tydens asynchrone transmissie word al die bisse wat 'n karakter vorm, as 'n enkele transmissiestring gestuur ✓
Vorm 'n beginbiss die begin van 'n karakter en 'n stopbiss die einde.
Die transmissie nie deur 'n klok gesynchroniseer nie. **Enige 2 korrekte feite. /Any 2 correct facts** ✓ ✓ (2)
All the bits that comprise a character are sent as a single transmission string
A start bit marks the beginning of the character and a stop bit the end
A clock does not synchronize the transmission
Sinchrone
Data word in blokke versend ✓, wat beheer word deur elektroniese klokpulse. ✓ OF transmissie vind teen vaste intervalle en teen 'n vaste tempo plaas. **Data is transferred in blocks ✓ controlled by electronic clock pulses** ✓. OR Transmission occurs at fixed intervals and fixed rates (2)
B Sender✓ , medium✓ en ontvanger✓
OF rekenaars, kabels, netwerkkoppelvlakkaarte, netwerkprogrammatuur
Sender✓ , medium✓ and receiver✓
OR computers, cables, network interface cards, network software (3).
C Simpleks✓ / Simplex / slegs in een rigting / One direction only
Half -dupleks ✓ / Half-duplex Beide rigtings, maar nie gelyktydig nie. / Both directions but only one interface can transmit at a time
Vol-dupleks ✓ Beide rigtings gelyktydig / Full-duplex / Both directions simultaneous
OF Sketse / OR Drawings OR Examples / OR Voorbeelde (3)
D Enige twee van
'n Groep bisse word gelyktydig versend.
Toestelle is naby aan mekaar
Koste kan duur word / crosstalk
Sketse
Any two of
'n Group of bits are transmitted simultaneously
Devices are near to one another
Cost expensive / crosstalk
Drawings ✓ ✓ (2)
E Bis vir bis word versend. ✓ (2)
Langer afstande as parallel. ✓
Bit by bit is transmitted ✓
Longer distances than parallel transmission ✓

- 3.2.1 Ethernet ✓ (5)
 3.2.2 koaksiale ✓ / coaxial
 3.2.3 UTP ✓
 3.2.4 ster ✓ / star
 3.2.5 Hub ✓
- 3.3 Versending teen 'n baie hoë spoed (2)
 Betroubaar en veilig
 Imuun teen meeluistering
 Vesel het baie minder seinverswakking as koper en kan kilometers ver versend word.
 Kabels is dun en lig in gewig en kan dus in beknopte ruimtes gebruik word. **Enige 2 kenmerke.** ✓ ✓ / Any two.
Supports very high transmission rates
Reliable and secure
Fibre is immune to eavesdropping
Fibre has much lower attenuation than copper and can transmit over distances measured in kilometres.
They are thin and lightweight, therefore they can be used in cramped areas.
- 3.4 Dit verwys na tegnieke wat gebruik word om te verseker dat data wat op rekenaarstelsels gestoor word nie beskadig ✓ word of dat daar op ongemagtigde wyse tot hierdie data toegang verkry nie. ✓ (2)
It refers to techniques which can be used to ensure data stored on computer systems is not damaged ✓ or that there is no unauthorised access to this data. ✓ Any two facts / Enige twee feite
- 3.5 Boodskappe word in kleiner eenhede/pakkies verdeel ✓ voordat dit versend word. Hierdie eenhede staan as pakkies ✓ bekend en volg nie noodwendig dieselfde roete nie. ✓ (3)
Messages are broken up into smaller ✓ units called packets ✓ and may follow different routes through the network. ✓
- 3.6.1 A satteliet ✓ (skottel) / satellite
 B diensverskaffer ✓ /program / service provider (5)
 C telefoonlyne ✓ / telephone lines
 D modem ✓
 E modem ✓
- 3.6.2 Skakel analogseine om na digitale ✓ seine en andersom. ✓ (2)
Convert analog signals to digital ✓ and digital to analog ✓
 OR Access to the Internet(1 mark) / Toegang tot die Internet(1 punt)
- 3.6.3 Waar die diensverskaffer gelée is.
 Die beskikbaarheid van 'n hulppiens.
 Die koste van die diensverskaffer
 Die diens bv. of jy 'n persoonlike webblad op die web kan plaas sonder addisionele koste.
Enige 2 faktore ✓ ✓ / Any two.
Where the ISP is situated
The availability of a help line
The cost of the ISP
Whether the ISP will host your personal web page at no extra cost

VRAAG 4 / QUESTION 4 [10]

- 4.1 Baie meer mense het rekenaars en Internet. Mense besef die waarde van die Internet en begin al hoe meer sake doen deur die Internet bv. banksake, handel.
Enige 2 korrekte feite. Any two correct facts. ✓ ✓ (2)
Many more persons have computers and Internet. People realise the value of the Internet and does more and more business through the Internet e.g. bank business, commerce.
- 4.2 Vergroting van die aantal bisse wat op 'n slag hanteer kan word
Kasgeheue
Ingeboude hulpverwerkers in SVE
Die manier waarop skyfies vervaardig word
Pyplynverwerking
Beter speletjies / multimedia / hoë grafika vereistes
✓ ✓ ✓ **Enige drie / Any three** (3)
*Increasing the number of bits that can be handled
Cache memory
Included co-processors
The techniques used to manufacture the CPU chips
Pipelining
Games / multimedia / demand for better graphics*
- 4.3 Enige een van: (Linux), Windows NT, XP, 2000. ✓ (1)
Any one of: (Linux), Windows NT, XP, 2000
- 4.4 Ja, dit gebeur nog steeds bv. nuwe rekenaarvirusse wat nog daagliks hul verskyning maak wat onverwags stelsels binnedring. ✓
Enige goeie motivering / Any good motivation (1)
Yes, it still happens .e.g. new computer viruses that are still appearing daily which penetrates systems unexpectedly.
- 4.5 Ja, daar is verskeie maatreëls wat getref word. Daar is maatskappye wat die gehalte en betroubaarheid van e-handelaars verifieer. ✓ OR Inligting word geëenkodeer.
Enige goeie motivering / Any good motivation (1)
Yes, there are various actions which can be done. There are companies who verify the quality and reliability of e-traders. ✓ OR Information is encoded.
- 4.6 'n Persoon wat in rekenaarstelsels inbreek. ✓
A person that breaks into systems. (1)
- 4.7 **Enige nuwe apparaat./ Any new device** (1)
Palmtops, Pentium IV, AMD e.g. Athlon , Smart phones , Video cards, DVD, WAP, Bluetooth, LCD, MP3 players

VRAAG 5 / QUESTION 5 [20]

- 5.1 LCD/ Liquid Crystal Display / TFT ✓ (1)
5.2 Digitale kamera/DVD/ Data-projektor✓
Digital camera/DVD/Data projector ✓ (1)
- 5.3 'n Rekenaar waarvan die verwerker deur AMD vervaardig word. ✓ (1)
A computer with a AMD processor .
- 5.4 ISDN lyn / ISDN line
Vinnige modem / Fast modem
Satelliet verbinding / Satellite
Diginet
Keuse van diensverskaffer / *The choice of a Internet service provider*
Enige 2 korrekte redes / Any 2 correct reasons. ✓ ✓ (2)
- 5.5.1 WAP – is nuwe protokol wat mense instaat stel om toegang tot die Internet te verkry met behulp van 'n handtoestel soos 'n pager, smartphone en tweerigtingradio. ✓
Bluetooth – is nuwe tegnologie wat fokus op draadlose kommunikasie. ✓ (2)
WAP – is a new protocol that allows people to access the Internet using a wireless handheld device such as a cell phone, pager smart phone or two-way radio. ✓
Bluetooth - is new technology that focus on wireless communication.
✓ Saam bespreek – 1 punt / Discuss both - 1 mark
- 5.5.2 Ons gaan nie meer afhanklik wees van 'n rekenaar om bv. e-pos boodskappe te stuur nie /Internet toegang nie. Ons gaan dit met 'n selfoon doen. ✓ / Koste van kabels
Enige korrekte feit / Any correct fact. (1)
We will not be dependant on a computer to send for example email messages / Internet. We will do it with a cell phone ✓ / Cost of cables
- 5.6.1 ISDN is 'n internasionale kommunikasiestandaard om stem, video en data oor digitale telefoonlyne ✓ te versend. OF / OR (1)
Vinniger Internet toegang / Faster Internet access
Integrated Services Digital Network
ISDN is an international communications standard for sending voice, video and data over digital telephone ✓ lines.
- 5.6.2 A Hoë koste / High cost ✓
B Baie goeie bandwydte / Extremely good bandwidth ✓
C Op aanvraag / On-Demand access(Dial-up) ✓ (3)
- 5.7.1 'n Groot aantal persone is nog skrikkerig om besigheid op die Internet te doen. Hulle is bang hulle kredietkaartbesonderhede word misbruik.
Enige korrekte feit / Any correct fact ✓ (1)
A large number of persons are still afraid to do business via the internet. They are afraid their credit card particulars are used unauthorised.

- 5.7.2** **Produkte kan aan baie meer mense geadverteer word.**
Dit is goedkoper om 'n webterrein saam te stel as 'n winkel.
Klein besighede kan kompeteer met enige groot besigheid.
Geografiese ligging kan 'n besigheid nie benadeel nie.
More people are exposed to advertisements of products.
It is cheaper to set up a web site than to set up a shop.
Small businesses can compete with any large businesses.
Geographical position of a business cannot be an advantage.
Enige 2 / Any 2 ✓ ✓ **(2)**
- 5.8** **Vergroting van die data wat op 'n skerm is.**
Daar bestaan ook sagteware wat 'n blinde persoon laat hoor wat op die skerm staan.
Daar is spesiale hardware en sagteware beskikbaar om fisies gestremde persone te akkomodeer bv. 'n sleutelbord met groter knoppies.
Spraakherkenningsstelsels.
Kan inkopies / banksake d.m.v Internet doen.
Enige 2 / Any 2 ✓ ✓ **(2)**
Enlargement of the data on the screen.
Software exists which allows a blind person to hear what is written on the screen.
There are special hardware and software available to accommodate physical handicapped persons eg a keyboard with larger keys.
Voice recognition.
Banking / shopping on the Internet.
- 5.9** **Toegang tot die Internet verkry**
SMS / MMS – boodskappe stuur
E-pos boodskappe stuur
Kan woordverwerking doen
Speletjies speel
Enige 3 / Any 3 ✓ ✓ ✓ **(3)**
Access to the Internet
SMS / MMS messages
E-mail could be send
Word processing
Games

VRAAG 6 / QUESTION 6 [20]

- 6.1.1 Die dokument se uitleg kan verbeter word. ✓ Maak die opskrif groter, ondersteep en 'n ander skriftype. ✓ Stel die adres linkslinlyn aan die regterkant van die dokument. ✓

Enige voorbeeld / Any example (3)

The layout of the document can be improved. Enlarge the heading, underline and use another letter type. Left justify the address on the right side of the document.

- 6.1.2 Regsintynstelling ✓ / Right aligned (1)
Gesentreerd ✓ (Middelinlynstelling/Middel) / Centred (1)

- 6.1.3 E-pos / E-mail: comzek@mweb.co.za ✓ / comzek@hotmail.com. (1)
Web-adres / Web adress: www.comzek.com ✓ / www.comzek.co.za (1)
Enige voorbeeld / Any example

6.2.1 =B2 ✓ *C2 ✓ (2) @B2*C2

6.2.2 =SUM ✓ (D2:D5) ✓ (2) @SUM(D2..D5)

6.2.3 =D7 ✓ *14/100 ✓ (2) = D7*14% @D7*0.14

6.2.4 =D7 + D8 OR/OR =SUM ✓ (D7:D8) ✓ (2)

- 6.3.1 MS WORD Brief opstel om aan kliënte te stuur ✓
EXCEL Grafieke teken van produkte se koste ✓
ACCESS databases van kliënte insleutel ✓

Enige voorbeeld / Any example (3)

MS WORD Compile a letter to send to customers ✓

EXCEL Draw graphs of the costs of products ✓

ACCESS Key in a data base of customers ✓

- 6.3.2 QUICKBOOKS Die besigheid se finansies doen.
QUICKBOOKS Do the business's finances. ✓ (1)

- 6.3.3 Norton Antivirus - Die program beskerm die maatskappy se rekenaars teen rekenaarvirusse.

The program protects the company's computers against computer viruses. ✓ (1)

Trek slegs 1 punt af indien tekens soos x en + gebruik word.
Subtract 1 mark for using x and +.