



**higher education  
& training**

---

Department:  
Higher Education and Training  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL CERTIFICATE  
COMPUTER PRACTICE N4**

(6030204)

**19 May 2021 (X-paper)  
09:00–12:00**

**CANDIDATES HAVE 30 MINUTES TO READ THE INSTRUCTIONS IN THE QUESTION PAPER BEFORE THE EXAMINATION STARTS.**

**This question paper consists of 16 pages and an answer sheet of 3 pages.**

**DEPARTMENT OF HIGHER EDUCATION AND TRAINING**  
**REPUBLIC OF SOUTH AFRICA**  
NATIONAL CERTIFICATE  
COMPUTER PRACTICE N4  
TIME: 3 HOURS  
MARKS: 180

---

**INSTRUCTIONS TO INVIGILATORS AND CANDIDATES**

Read the following instructions carefully before answering the question paper. Invigilators will explain if necessary.

1. The question paper comprises of TWO sections:

SECTION A: Theory (60 marks)

SECTION B: Word processing, spreadsheet and presentation (120 marks)

SECTION A (QUESTIONS 1–5) must be answered on the attached ANSWER SHEET. The ANSWER SHEET must be placed in the front of the EXAMINATION FOLDER. Approximately 60 minutes should be spent on this section.

SECTION B is done with the aid of a word processing program, spreadsheet program and presentation program and approximately 2 hours should be spent on this section.

2. In the event of a power failure or a computer or printer breakdown, the invigilator must make the necessary arrangements for the candidate to continue and the actual time lost must be added.
3. If there is a problem with certain printers, e.g. it does not print ë, a report must be submitted with the centre's ANSWER SHEETS.
4. A candidate may have a list of ASCII codes with him/her. The spell checker may be used.
5. Each answer must be printed on a separate sheet of paper and on ONE side of the paper only. PRINTOUTS must be placed in the EXAMINATION FOLDER immediately.
6. At the conclusion of the examination session, all PRINTOUTS to be marked must be placed in the EXAMINATION FOLDER and handed to the invigilator. Only ONE PRINTOUT per question or subsection of a question may be handed in. PRINTOUTS not submitted for marking must be handed in to the invigilator at the end of the examination session and destroyed at the end of the day. No PRINTOUTS whatsoever may be removed from the examination room or placed into wastepaper bins.

7. PRINTOUTS to be marked must be arranged in the same order as the questions in the EXAMINATION PAPER.
  8. In SECTION B (Word processing) only Courier New 12 pt may be used. Margins of 2,54 cm/1" should be used unless instructed differently. In SECTION B (Spreadsheet) Courier New 12 pt, Calibri 11 pt or Arial 10 pt may be used.
  9. Key in the QUESTION NUMBER as well as your EXAMINATION NUMBER for each question as indicated in the instructions. No answers without printed EXAMINATION NUMBERS will be marked.
  10. All work on the computer should be saved at regular intervals to prevent loss of work in the event of a power failure. No additional time will be allowed to redo such lost work. It is the candidates' responsibility to protect their answers.
  11. In order to print the original as well as the edited version of the answers, candidates are reminded to save the work after each separate section before printing.
  12. At the end of the examination session each candidate must hand in the PRINTOUTS of the answers as well as the diskette with the saved answers (properly marked with the candidate's EXAMINATION NUMBER). If the candidate's work is saved on the hard disk/network, the invigilator(s) must copy the answers to a compact disk/memory stick and the answers must immediately be deleted from the hard disk/network. These diskettes must be handed to the examination section for safekeeping for at least SIX months in case enquiries are made by DHET.
  13. Please note that no question papers may be taken from the examination room until at least ONE hour after the commencement of the last session. All papers must consequently be handed in. They may be returned to candidates on completion of the examination.
  14. In the event of a question paper being written in more than one session, invigilators must ensure that all candidates' answers are removed from the hard disks or the network before candidates for the next session are allowed into the examination room.
  15. No candidate may print his/her work for another candidate, make his/her diskette available to another candidate or access another candidate's work on the network. Any attempt to access information from or transfer information to another candidate in whatever manner is a contravention of the examination rules and regulations and will be viewed in a very serious light.
-

**SECTION A: THEORY**

Answer QUESTIONS 1–5 on the attached ANSWER SHEET.

Approximately 60 minutes should be spent on this section.

---

**QUESTION 1: COMPUTING CONCEPTS AND APPLICATION SKILLS**

1.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (1.1.1–1.1.5) on the attached ANSWER SHEET.

1.1.1 There are three common types of ICT systems namely information systems, computer systems and communication systems.

1.1.2 ICT stands for Information Communication Technology.

1.1.3 A laptop is an example of a mobile device.

1.1.4 A personal computer consists of two components, namely hardware and software.

1.1.5 A keyboard is an example of an output device.

(5 × 1) (5)

1.2 Write the following abbreviations in full next to the question number (1.2.1–1.2.5) on the attached ANSWER SHEET.

1.2.1 CPU

1.2.2 RAM

1.2.3 HDD

1.2.4 MB

1.2.5 OS

(5 × 1) (5)

**[10]**

**QUESTION 2: NETWORKING AND COMMUNICATION SKILLS**

Choose an item or a word from COLUMN B that matches a description in COLUMN A. Write only the letter (A–J) next to the question number (2.1–2.7) on the attached ANSWER SHEET.

COLUMN A		COLUMN B	
2.1	Electronic computing devices that are connected together e.g. computers	A	router
2.2	Used mainly in television remotes for short distance signals	B	NIC
2.3	Cables that use pulses of light to transmit data over long distances	C	network
2.4	Basic components required for network communications	D	wireless network
2.5	A device used to filter and forward data packets from one network segment to another	E	wired network
2.6	Devices that are connected via physical cables	F	modem
2.7	A device used to connect the network to an internet service provider	G	fibre optics
		H	radio waves
		I	infrared
		J	HAN

(7 × 2)

**[14]****QUESTION 3: DATA INFORMATION MANAGEMENT AND COMPUTATIONAL THINKING**

Answer the following questions on the attached ANSWER SHEET. Provide full sentences where you need to define and explain, as one-word answers will not be accepted in such instances.

- 3.1 Define the term *computational thinking*. (2)
- 3.2 Name the FOUR main components of computational thinking. (4)
- 3.3 Name any FOUR types of collaboration tools. (4)
- 3.4 Explain what a *blog* is. (2)
- 3.5 Give TWO examples of blog sites/services. (2)
- 3.6 Give ONE advantage and ONE disadvantage of blogging. (2)

**[16]**

**QUESTION 4: INTERNET AND COMMUNICATION SKILLS**

Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (4.1–4.5) on the attached ANSWER SHEET.

- 4.1 The difference between the *world wide web* and the *internet*.
- A The internet is a global network of networks and the world wide web runs on the internet itself.
  - B The internet allows people to connect to other people as well as digital services.
  - C The world wide web exists because of internet.
  - D All of the above.
- 4.2 Two components of a URL/Web address are:
- A Domain name and file path
  - B Domain name and blog path
  - C Digital name and file path
  - D None of the above
- 4.3 What does the abbreviation, IP, stand for?
- A Internet practice
  - B Internet publicity
  - C Information protection
  - D Internet protocol
- 4.4 Examples of different types of web browsers are:
- A LinkedIn, Firefox, Opera
  - B Internet Explorer, Google Chrome, Microsoft Edge
  - C Google Chrome, WhatsApp, Facebook
  - D Microsoft Edge, Instagram, Facetime
- 4.5 The purpose of a search engine is ...
- A to make changes in an application software program.
  - B to allow sharing of files.
  - C used for searching the information which is present in the web.
  - D all of the above.

(5 × 2) [10]

**QUESTION 5: DIGITAL CITIZENSHIP**

Read the following short scenario and answer the questions.

Julia is a 21-year-old student at university. She spends most of her time online and feels sick and depressed if she loses access to the internet. She feels 'cut off' from the world.

At one stage she almost found herself to be a victim of cybercrimes. An e-mail was sent to her personal e-mail account requesting her to provide the sender with her personal banking details. Luckily, Julia was aware of cybercrimes and didn't provide the sender with any details.

Because of Julia's constant use of her headphones, her hearing has deteriorated. Luckily, she was able to receive treatment before she went completely deaf. Julia spends most of her time using her laptop on her bed. This causes her to experience major backache when she goes to sleep.

- 5.1 Why does Julia feel cut off from the world? What negative impact does this have on her social well-being? (2)
- 5.2 What type of cybercrime was Julia almost a victim of? In the future, what other precaution can she take not to fall victim to this crime? (2)
- 5.3 What negative and positive impact does ICT have on Julia? (4)
- 5.4 What ergonomic friendly workstation can Julia get to reduce her back pain? (2)

**[10]****TOTAL SECTION A: 60**

**SECTION B: PRACTICAL**

Approximately 120 minutes should be spent on this section.

**QUESTION 6: WORD PROCESSING****QUESTION 6A****TIME: 10 minutes****MARKS: 12**

1. Key in the text as indicated below. Use Courier New 12 pt.
  2. Insert a header with QUESTION 6A in capital letters left-aligned and your EXAMINATION NUMBER right-aligned.
  3. Set the left- and right-hand margins as 2,54 cm/1".
  4. The text should be left-aligned and in single-line spacing except where indicated differently.
  5. Save the document as DIGITAL.
  6. Print the document and place the PRINTOUT in your EXAMINATION FOLDER.
- 

So, what is digital marketing?

‡

Basically, digital marketing is marketing done online. Businesses control their online marketing presence through digital channels like Google search, social media, e-mail and their respective websites to reach current and prospective customers.

‡

Digital marketing is comparable to traditional marketing, but the difference is that digital marketing uses digital devices. Nevertheless, it is measured as a form of inbound marketing because its aim is for people to find one through:

‡

Content in the form of blogs or online press releases

Online adverts

Organic online search

Paid search

‡

The more people see the site or content frequently, the more familiar they will become with the brand. This will lead to one developing a relationship with one's customers online.

(12)



## **QUESTION 6B**

**TIME: 35 minutes**

**MARKS: 33**

1. Retrieve the document, DIGITAL, and change QUESTION 6A in the header to QUESTION 6B.
  2. Edit the document as indicated on the next page and according to the following instructions.
  3. Change the left-hand margin to 3,81 cm/1,5".
  4. Insert page numbers top, centre.
  5. Save the document as DIGITAL2.
  6. Print the document and place the PRINTOUT in your EXAMINATION FOLDER.
-

**QUESTION 6B (CONTINUED)**

So, what is digital marketing? **uc, bold, centre**

Copy and paste where indicated

Basically, digital marketing is marketing done online. Businesses control their online marketing presence through digital channels like Google search, social media, e-mail and their respective websites to reach current and prospective customers. **stet**

‡  
\*\*

‡  
‡

Digital marketing is comparable to traditional marketing, but the difference is that digital marketing uses digital devices. Nevertheless, it is measured as a form of inbound marketing because its aim is for people to find one through:

‡

4. Content in the form of blogs or online press releases

2. Online adverts

‡

1. Organic online search

‡

3. Paid search

--- Insert page break

Sort numerically according to paragraph numbers as indicated.

The more people see the site or content frequently, the more familiar they will become with the brand. This will lead to one developing a relationship with one's customers online.

Indent both margins by 2,54 cm/1"

Candidate, insert the table at \*\*.



Types of traditional marketing <b>uc, bold, underline, centre</b>		
Business cards	Posters	Billboards
Ads in newspapers and magazines	Commercials on TV and radio	Brochures

‡  
‡

right-align contents of the table

Paste paragraph here, change the paragraph to TWO equal columns. Insert a column break before the word 'Google' ('Google' should be in column 2). Change back to 1 column after the columns.

‡

Candidate, insert tab stops and the text below as indicated:

	6,5 cm/2,56" left tab stop	11 cm/4,33" left tab stop	
Digital advertisement	Method	Example	Arial Narrow 10 pt
In-game advertising	Ads in game	Brands or products	
Social media marketing	Social media channels	Facebook, Twitter	

(33)  
[45]

**QUESTION 7: SPREADSHEET****QUESTION 7A****TIME: 5 minutes****MARKS: 10**

1. Create the spreadsheet below.
2. Insert a footer with your EXAMINATION NUMBER left-aligned and QUESTION 7A right-aligned in capital letters.
3. Display figures as indicated.
4. Adjust the column widths to fit the spreadsheet on ONE page. Use portrait orientation. Do not use the *Fit-to-one-Page* option.
5. Save the spreadsheet as WORLD.
6. Print the spreadsheet in portrait orientation and place the PRINTOUT in your EXAMINATION FOLDER.

---

	A	B	C	D	E	F	G
1	WORLD OF DIGITAL MARKETING						
2							
3	MARKETER SURNAME	MARKETER NAME	BRANCH	JANUARY SALES	JANUARY COMMISSION	FEBRUARY SALES	FEBRUARY COMMISSION
4	Andrews	John	Welkom	25000		18000	
5	De Wet	Sarel	Bloemfontein	32000		47000	
6	Govender	Berty	Durban	54000		39000	
7	Motaung	Alfred	Johannesburg	52000		33000	

(10)

**QUESTION 7B****TIME: 40 minutes****MARKS: 35**

1. Retrieve the spreadsheet, WORLD.
2. Change QUESTION 7A in the footer to QUESTION 7B.
3. Make all the changes as indicated in the spreadsheet and according to the instructions below.
  - 3.1 Change the paper orientation to landscape.
  - 3.2 Insert rows, columns and text as indicated in the spreadsheet.
  - 3.3 Insert formulas where the alphabet letters appear to do the following calculations:
    - A: JANUARY COMMISSION: JANUARY SALES  $\times$  8%
    - B: FEBRUARY COMMISSION: FEBRUARY SALES  $\times$  10%
    - C: TOTAL COMMISSION: JANUARY COMMISSION + FEBRUARY COMMISSION
    - D: % OF COMMISSION: TOTAL COMMISSION as percentage of column TOTAL (use absolute cell reference)
    - E: TOTAL: Column totals
    - F: AVERAGE COMMISSION: Average of JANUARY COMMISSION
    - G: HIGHEST COMMISSION: Highest FEBRUARY COMMISSION
    - H: LOWEST TOTAL COMMISSION
  - 3.4 Copy the formulas to the other cells as indicated in the spreadsheet.
  - 3.5 Display the column, % OF COMMISSION, as a percentage with no decimals.
  - 3.6 Display AVERAGE COMMISSION, HIGHEST COMMISSION and LOWEST TOTAL COMMISSION as integers.
  - 3.7 Display all other values as currency with two decimals.
  - 3.8 Insert horizontal and vertical borders as indicated in the spreadsheet.

**QUESTION 7B (CONTINUED)**

- 3.9 Adjust the column widths to fit the spreadsheet on ONE page. Do not use the *Fit-to-one-Page* option.
  4. Save the spreadsheet as WORLD2.
  5. Print the spreadsheet without row and column headings in landscape orientation and place the PRINTOUT in your EXAMINATION FOLDER.
-

**QUESTION 7B (CONTINUED)**

	A	B	C	D	E	F	G	H	I
1	WORLD OF DIGITAL MARKETING				] Comic Sans 16 pt, uc, bold, merge and centre				
2	open row								
3	PERFORMANCE PER BRANCH				] insert, uc, italics, underline				
4	open row				all column headings bold, centre			insert columns	
5	MARKETER SURNAME	MARKETER NAME	BRANCH	JANUARY SALES	JANUARY COMMISSION	FEBRUARY SALES	FEBRUARY COMMISSION	TOTAL COMMISSION	% OF COMMISSION
6	Andrews	John	Welkom	25000	A	18000	B	C	D
7	De Wet	Sarel	Bloemfontein	32000	↓	47000	↓	↓	↓
8	Govender	Berty	Durban	54000	↓	39000	↓	↓	↓
9	Motaung	Alfred	Johannesburg	52000	↓	33000	↓	↓	↓
10	TOTAL ] insert, uc, bold				E				
11	open row								
12	AVERAGE COMMISSION				F				
13	HIGHEST COMMISSION				G				
14	LOWEST TOTAL COMMISSION				H				

} insert, uc, bold

(35)  
[45]

**QUESTION 8: PRESENTATION****TIME: 30 minutes****MARKS: 30**

Create a presentation on the advantages of digital marketing by using the software that you are familiar with.

1. Create a new blank presentation and follow the instructions below.
  2. Insert as footer with your EXAMINATION NUMBER and QUESTION 8 in capital letters.
  3. Use the *Title Slide* layout for SLIDE 1 and  
Use the *Title and content* layout for SLIDE 2 of this presentation.
  4. Insert the text and apply all manipulation instructions as given on the next page.
  5. Change the theme of the presentation to FACET.
  6. Retrieve the Word file, MARKETING, from the diskette/hard drive/desktop. Copy and paste all the text of the MARKETING file in the second slide in the content box.
  7. Find and replace the word 'businesses' with 'BUSINESSES' in upper case.
  8. Copy the image from the Word file, MARKETING, and place the image top left on the second slide.
  9. Save the presentation as PRES1.
  10. Print each slide on a new page and place the PRINTOUTS in your EXAMINATION FOLDER.
-

Slide 1

**DIGITAL MARKETING**

*Advantages of Digital Marketing*

Insert title, uc, Berlin Sans FB 40 pt, bold, left-aligned

Insert sub-title, uc, Berlin Sans FB 18 pt, italics, centre

Slide 2

**ADVANTAGES**

- Improved conversion rates for businesses
- Cost effective than traditional marketing in businesses
- Higher revenues for businesses
- Compete with large businesses
- ~~Get prepared for the "Internet of things"~~
- Earn people's trust and build brand reputation
- Ensure online survival for businesses

Copy text from MARKETING file and paste in content box  
Insert solid round bullets, Comic Sans 16 pt, left-aligned

del

**DIGITAL MARKETING**

Copy and paste the image top left in the slide

[30]

**TOTAL SECTION B: 120**  
**GRAND TOTAL: 180**



**COMPUTER PRACTICE N4**

**ANSWER SHEET**

**EXAMINATION NUMBER:**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**SECTION A: THEORY**

**QUESTION 1: COMPUTING CONCEPTS AND APPLICATION SKILLS**

1.1

1.1.1	
1.1.2	
1.1.3	
1.1.4	
1.1.5	

(5 × 1) (5)

1.2

1.2.1	
1.2.2	
1.2.3	
1.2.4	
1.2.5	

(5 × 1) (5)

**[10]**

**QUESTION 2: NETWORKING AND COMMUNICATION SKILLS**

2.1
2.2
2.3
2.4
2.5
2.6
2.7

(7 × 2) [14]

**QUESTION 3: DATA INFORMATION MANAGEMENT AND COMPUTATIONAL THINKING**

3.1		
		(2)
3.2		
		(4)
3.3		
		(4)
3.4		
		(2)
3.5		
		(2)
3.6	<b>ADVANTAGE</b>	<b>DISADVANTAGE</b>
	(1)	(1)

[16]

**QUESTION 4: INTERNET AND COMMUNICATION SKILLS**

4.1	
4.2	
4.3	
4.4	
4.5	

(5 × 2) [10]

**QUESTION 5: DIGITAL CITIZENSHIP**

5.1	
	(2)
5.2	
	(1)
	(1)
5.3	POSITIVE –
	NEGATIVE –
	(4)
5.4	
	(2)

[10]

**TOTAL SECTION A: 60**