

Centre Number	Candidate Number	Candidate Name
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**NAMIBIA SENIOR SECONDARY CERTIFICATE**

**COMPUTER STUDIES ORDINARY LEVEL**

**4325/1**

PAPER 1

2 hours 30 minutes

Marks 100

**2019**

No Additional Materials are required.

**INSTRUCTIONS AND INFORMATION TO CANDIDATES**

- Candidates answer on the Question Paper in the spaces provided.
- Write your Centre Number, Candidate Number and Name in the spaces at the top of this page.
- Write in dark blue or black pen.
- You may use a soft pencil for any rough work, diagrams or graphs.
- Do not use correction fluid.
- Do not write in the margin *For Examiner's Use*.
  
- Answer **all** questions.
  
- The number of marks is given in brackets [ ] at the end of each question or part question.
- The businesses mentioned in this question paper are entirely fictitious.

**For Examiner's Use**

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Marker	
Checker	

This document consists of **15** printed pages and **1** blank page.



Republic of Namibia

**MINISTRY OF EDUCATION, ARTS AND CULTURE**

1 Describe the following terms as they are used in computers, giving examples where appropriate.

(a) Spooling

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[2]

(b) Cache memory

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[2]

(c) Data logging

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[2]

(d) Data validation

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[2]

[8]

2 An orphanage in Kavango region uses a manual system to record information. Employees who work with the system have been complaining about a number of difficulties and too much clerical and repetitive work with the system. The matron of the orphanage approached you to assist with developing a computerised system for the orphanage.

(a) Describe the importance of collecting data about the existing system when preparing the designing of the new system.

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[2]

(b) Explain the purpose of technical documentation and list **two** items that make up this documentation.

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[3]

[5]

3 The vast usage of computers in manufacturing industries have brought about a number of effects.

(a) Describe **two** positive effects of computer technology in manufacturing industries.

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2.....  
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[2]

(b) Describe **two** negative effects of e-waste on the environment.

1.....  
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2.....  
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[2]

[4]

4 A senior secondary school just purchased two computers to be used in the school office. One computer will be used by the school secretary and the other will be used by the school accountant. Both computers came with an operating system and some application programs.

(a) Describe **two** functions of an operating system.

1 .....

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2 .....

.....

[2]

(b) The secretary will make use of general purpose software to carry out different tasks.

Give **two** advantages of using the general purpose software.

1 .....

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2 .....

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[2]

(c) The accountant needs a special software. The school hired an expert to develop custom-made software for the accountant to use.

Describe **two** disadvantages of custom-made software.

1 .....

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2 .....

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[2]

(d) Suggest **two** ways in which the accountant's computer in this school can be secured.

1 .....

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2 .....

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[2]

[8]

- 5 The spreadsheet shows the details of office expenses for four months.

	A	B	C	D	E	F	G
1	<b>Expenses (N\$)</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>Total</b>	<b>Average</b>
2	Rent	3 500	3 500	4 000	4 000		
3	Power	450	380	420	390		
4	Wi-Fi	350	350	350	400		
5	Stationery	2 700	4 560	384	7 240		
6	Sundries	520	540	480	360		
7	Total						

- (a) Describe how all the values in this spreadsheet can be formatted to currency?

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[2]

- (b) Which formula would be entered in cell reference F2?

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[2]

- (c) Which condition can be used to filter stationery expenses more than N\$1 000?

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[2]

[6]

6 The database contains data about orders that have been made.

Supplier	Code	Price (N\$)	Quantity (kg)	Delivery Date
fm2001	4590	22.5	250	12/9/2018
vf2150	3421	15	400	14/9/2018
vg4561	6643	35.5	200	10/9/2018
f7066	7486	25.4	350	11/9/2018
bp5221	1683	18.9	400	12/9/2018
fm2001	6645	23.75	250	11/9/2018

(a) Which field would be best suited as a primary key? Give a reason.

Field .....

Reason.....

.....

.....

[2]

(b) The following search condition is input

(Code = 6643) AND (Price (N\$) > 20)

Write down the output using the Supplier field only.

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[1]

(c) Write a search condition to output the dates of all items to be supplied by fm2001.

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[2]

[5]

7 During the process of testing a program, a number of errors can be identified.  
Describe the following errors giving an example on each:

(a) Logic errors

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[2]

(b) Syntax errors

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[2]

[4]

8 The Internet has changed a lot of areas in the world.

(a) Describe **two** advantages of the internet.

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2 .....

[2]

(b) Internet protocols describes a set of rules that organises how files are transmitted over the Internet. Tom wants to share some files with his new smartphone.

Outline the set of protocols that Tom's smartphone would use in order for Tom to share files with his friends over the Internet.

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[3]

(c) State **three** examples of how computers are used in banking.

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[3]

[8]



9 (a) Explain how virtual reality can be used in training of medical doctors.

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[3]

(b) How does a feedback process system take place in controlling heat of a car engine?

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[4]

[7]

**10** RAM and ROM are the primary memory of a computer system.

**(a)** Give **two** differences between RAM and ROM.

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2 .....

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[2]

**(b)** Describe the piece of software found in ROM and explain how it is used during the booting of a computer.

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[3]

**(c)** Secondary memory is necessary for storing files for future reference.

Outline the differences between HDD and SSD.

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[4]

[9]

11 (a) Describe the term interrupt and give an example of a hardware interrupt.

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[2]

(b) Explain how the interrupt handling feature of an operating system can handle an interrupt.

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[7]

**12** OneTel is one of the largest GSM operators in Namibia mobile telecommunications. It operates on GSM.

**(a)** Briefly describe the GSM technology and outline the services that could be available on this mobile communication technology.

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[4]

**(b)** OneTel supports GPRS. Explain the GPRS data service and describe applications that could be available on this service.

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[4]

[8]

**13** A number of organisations are turning to cloud computing for different services. Cloud computing also have services for individuals.

**(a)** Briefly describe cloud computing.

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[2]

**(b)** Describe the following services available on cloud computing and explain how organisations can benefit from each of them.

**(i)** SaaS

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[2]

**(ii)** IaaS

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[2]

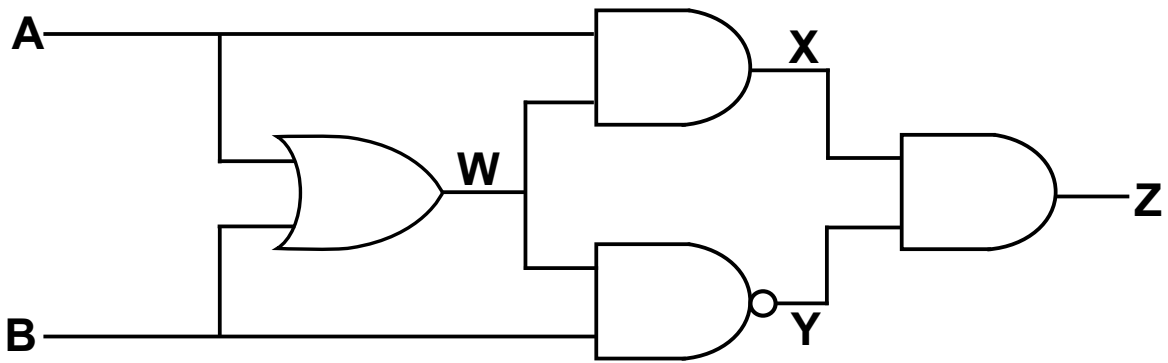
**(c)** Explain how organisations can benefit from cloud computing services.

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[2]

[8]

14 The logic gate for a circuitry is illustrated below.



(a) Complete the truth table to the above logic gate.

A	B	W	X	Y	Z
0	0				
0	1				
1	0				
1	1				

[4]

(b) Convert  $AD4_{16}$  to denary. Show your working.

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[2]

[6]



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