higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

INTRODUCTORY TO INFORMATION SYSTEMS
NQF LEVEL 2

16 November 2023

This marking guideline consists of 7 pages.

Copyright reserved

SECTION A

QUESTION 1

1.1	1.1.1	B		
	1.1.2	A		
	1.1.3	C		
	1.1.4	D		
	1.1.5	D		
	1.1.6	A		
	1.1.7	C		
	1.1.8	D		
	1.1.9	D		
	1.1.10	C		
			(10 × 1)	(10)

1.2	1.2.1	Organisation		
	1.2.2	Security		
	1.2.3	Information		
	1.2.4	Worm		
	1.2.5	Intellectual		
	1.2.6	Batch		
	1.2.7	Projector		
	1.2.8	Qwerty		
	1.2.9	Lossless		
	1.2.10	Headphones		
			(10 × 1)	(10)

1.3	1.3.1	True		
	1.3.2	False		
	1.3.3	True		
	1.3.4	True		
	1.3.5	False		
	1.3.6	True		
	1.3.7	True		
	1.3.8	True		
	1.3.9	False		
	1.3.10	False		
			(10 × 1)	(10)

Copyright reserved

1.4	1.4.1	D		
	1.4.2	H		
	1.4.3	A		
	1.4.4	J		
	1.4.5	F		
	1.4.6	E		
	1.4.7	B		
	1.4.8	I		
	1.4.9	G		
	1.4.10	C		
			(10 × 1)	(10)

1.5	1.5.1	Strengths, weaknesses, opportunities and threats		
	1.5.2	Chief Financial Officer		
	1.5.3	Information Technology		
	1.5.4	Management Information System		
	1.5.5	Intrusion Detection System		
	1.5.6	Dynamic Random Access Memory		
	1.5.7	Digital Versatile Disc		
	1.5.8	Control Unit		
	1.5.9	Solid-state Drive		
	1.5.10	Liquid Crystal Display		
			(10 × 1)	(10)
				[50]

TOTAL SECTION A: 50

SECTION B

QUESTION 2

2.1 The purpose of an organisation is to achieve its common goal. (2)

2.2
- Support functions support an organisation by performing secondary tasks.
- The work support functions do contribute indirectly to an organisation's main goals. (2)

2.3
- Student liaison officer
- Library services
- Examinations department
- Sport facilities (Any 2 × 1) (2)

2.4 2.4.1
- Define the problem at the plant.
- Gather information about the problem by speaking to the operators.
- Analyse the gathered information and brainstorm ideas to solve the problem by involving specialists.
- Choose a suitable or feasible solution.
- Implement the best solution.
- Monitor the outcome to determine if the problem has been solved.

(6 × 2) (12)

2.4.2 Middle management (2)

2.4.3
- A manager's experience play a role in decision-making.
- A manager's understanding of the situation would assist in making decisions. (2)

[22]

QUESTION 3

3.1
- People
- Hardware
- Software
- Procedures
- Network
- Data (Any 5 × 2) (10)

3.2 People
- People are the users and operators of an information system.

Hardware
- Hardware is the physical parts of an information system and are used with software.

Software
- Software manages collected information and performs special functions upon request.

Procedures
- Procedures ensure that everyone uses the system in the same manner.

Networks
- Networks allow information to be shared and distributed to everyone using the system.

Data/Database
- Data is held on the database where it can be manipulated and used as necessary. (Any 3 × 2) (6)

3.3
- Data is stored on a database.
- A user requests information pertaining to a particular topic.
- The search results return the information if it is available on the database.

(3 × 2) (6)

3.4
- How do you delete a page break?
- How do you save?
- How do you bold a word?

(Any ONE) (1)

[23]

QUESTION 4

4.1 Risk refers to the possibility of damage to the assets of a business or loss of its data. (2)

4.2
- It could face theft of their computer systems.
- It could lose data because of theft.
- It could lose data or equipment because of malicious damage.
- Anyone could walk in and access information.

(Any 2 × 2) (4)

4.3
- Ensure that their systems are password protected.
- Use secure passwords.
- Do not share passwords.
- Lock their systems when they leave their desk.
- Avoid clicking on unknown links on emails.
- Use a firewall.
- Use good antivirus software.
- Do not leave a system unlocked and unattended.

(Any 3 × 2) (6)

4.4
- An antivirus program scans all files.
- It then compares the files to the virus definitions stored in its database.
- If a virus file is found, the program isolates the file and notifies the user.

(3 × 2) (6)

4.5 Because each department has its own server, not all departments will lose data. (2)

4.6
- Typing errors.
- Omissions in typing.
- Unintentional unauthorised access to data.
- Unintentional downloading of harmful software.

(Any 2 × 2) (4)

4.7
- Software piracy would result in a loss of revenue for the business.
- Software piracy could cause potential clients not forming partnerships because of the stigma.
- There will be a loss of personal income due to the loss of sales.
- The software could be misused creating a negative image for the business.
- The software development team may not be made aware of bugs owing to a lack of reporting.

(Any 2 × 2) (4)

Copyright reserved

4.8 Intellectual property refers to an innovative idea or an invention. That idea or invention legally belongs to its creator. (2)
[30]

QUESTION 5

5.1
- The Difference Engine was an automatic, steam-driven calculating machine.
- It was invented to compute numbers arranged in tables. (2 × 2) (4)

5.2 5.2.1 Desktop computer (2)

5.2.2 Laptop computer (2)

5.2.3
- A desktop computer relies on the mains for power whereas a laptop has a battery pack.
- A desktop is fixed in one place whereas a laptop is portable.
- A desktop can have large a large monitor. The monitor of a laptop, on the other hand, has a fixed size.
- A desktop uses a mouse to control the cursor whereas a laptop has a trackpad.
- On a desktop you can add or remove system cards; on a laptop you cannot. (Any 2 × 2 × 2) (8)

5.3.
- Multi-core processors allow multiple processes at the same time.
- Multi-core processors perform better than single-core processors.
- Multi-core processors are more efficient than single-core processors.
- Multi-core processors are able to carry out complex tasks with ease.
- Multi-core processors are faster than single-core processors. (Any 2 × 2) (4)

5.4
- Input devices
- Output devices
- Storage devices (3)

[23]

QUESTION 6

6.1
- Tower
- Monitor
- Keyboard
- Mouse
- Headset or speaker and microphone
- Printer (Any 6 × 2) (12)

6.2
- Keyboard entry uses keystrokes to enter data into a computer.
- Direct-entry devices read information printed on a bar code to enter data into the system. (2 × 2) (4)

6.3 6.3.1 Smart terminal
6.3.2 Smart terminal
6.3.3 Dumb terminal
(3 × 2) (6)

6.4
- Plotters can print large images.
- They are relatively cheap.
- Plotters are precise and accurate.
- They can print on various materials. (Any 3 × 2) (6)

6.5 6.5.1 A – Enter key
C – Shift key
D – Caps lock key
E – Tab key (4 × 2) (8)

6.5.2 The keys labelled B allow the user to control the cursor movement by using the keyboard. (2)

6.5.3 The space bar (2)

6.5.4 CTRL + S (2)

6.6
- LCD monitor
- Plasma monitor
- LED monitor (Any ONE) (1)

6.7
- Never drop a hard disk.
- Never wipe it with harsh chemicals.
- Do not expose it to heat.
- Do not submerge it in water. (4)

6.8 More than one hard disk drive is configured to function as one unit. (2)

6.9
- Raid 0
- Raid 1
- Raid 5
- Raid 6 (Any 3 × 1) (3)

[52]

TOTAL SECTION B: 150
GRAND TOTAL: 200

Copyright reserved