higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

INTRODUCTION TO INFORMATION SYSTEMS
NQF LEVEL 2

7 November 2022

This marking guideline consists of 8 pages.

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SECTION A

QUESTION 1

1.1	1.1.1	C
	1.1.2	A
	1.1.3	D
	1.1.4	A
	1.1.5	D
	1.1.6	C
	1.1.7	C
	1.1.8	D
	1.1.9	A
	1.1.10	B

(10 × 1) (10)

1.2	1.2.1	Organisation
	1.2.2	Networks
	1.2.3	Interact
	1.2.4	Risk
	1.2.5	Access
	1.2.6	Electrical
	1.2.7	Blu-ray
	1.2.8	Mouse
	1.2.9	Control total
	1.2.10	Smart

(10 × 1) (10)

1.3	1.3.1	True
	1.3.2	True
	1.3.3	True
	1.3.4	False
	1.3.5	False
	1.3.6	True
	1.3.7	True
	1.3.8	False
	1.3.9	True
	1.3.10	True

(10 × 1) (10)

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

(10 × 1) (10)

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1.5	1.5.1	Chief executive officer
	1.5.2	Human resources
	1.5.3	Hardware
	1.5.4	Transaction processing system
	1.5.5	Network operating system
	1.5.6	Personal computer
	1.5.7	Graphical user interface
	1.5.8	Central processing unit
	1.5.9	Multi-function printer
	1.5.10	Cathode-ray tube

(10 × 1) (10)
[50]

TOTAL SECTION A: 50

SECTION B

QUESTION 2

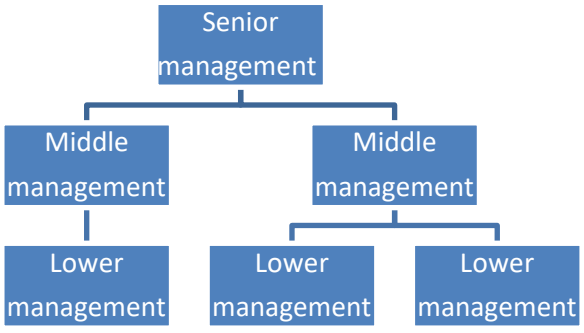
2.1
- A manager is a person who is responsible for ensuring that employees work towards the goal of the organisation.
- A manager is responsible for some of the activities in the organisation.
- A manager is a person who oversees the functioning of his/her department.

(Any 2 × 2) (4)

2.2
- Conduct interviews.
- Hire staff.
- Schedule shifts.
- Schedule training for staff.

(Any 2 × 2) (4)

2.3



(6)

(Give TWO marks for diagram showing three levels, TWO for labels applied and TWO for appropriate hierarchy.)

2.4
- Define the problem.
- Gather information.
- Analyse the information.
- Devise options.
- Choose the best option.
- Monitor the outcome.
- Brainstorm solutions.
- Choose a solution.
- Implement the solution.
- Evaluate the outcomes.

(Any 6 × 1) (6)

2.5
- Discussions
  Meetings are held where staff are encouraged to participate by providing their input.

- Interviews
  Staff members are interviewed individually to give input.

- Surveys
  Staff fill out questionnaires to relay their requirements.

- Workplace observation
  Engage staff during their daily routine to determine whether there are problems.

(Any 1 × 2) (2)
[22]

QUESTION 3

3.1 Any relevant example provided:
- Sales figures are input into the computer as data.✓✓
- The manager interprets the data to form information for assessing how the business is doing.✓✓✓
- Knowledge is obtained when the manager uses the information to make decisions on how to improve sales.✓✓ (7)

3.2
- Data/Database
- Procedures
- Software
- Hardware

(4 × 2) (8)

3.3
- Scalability
- Cost
- Ease of use
- Flexibility
- Ease of maintenance
- Performance
- Reliability

(Any 3 × 2) (6)

3.4
- Supports business processes
- Supports operations
- Supports decision making
- Supports strategy planning (Any TWO) (2)

[23]

QUESTION 4

4.1
- In a centralised information system, all devices are connected to a central point.
- In a centralised information system, the same information is shared among all users.
- In a centralised information system, all related information is stored in one place. (Any TWO) (2)

4.2
- Technical support is centralised.
- Data would be collected in the same manner throughout the business.
- Security is improved due to all information being at a central point.
- Responsibility and accountability are easily assigned. (Any 2 × 2) (4)

4.3 Transaction processing system (2)

4.4
- Mandatory access control is enforced by the operating system.
- Access to files is set by an administrator and cannot be changed by end users. (2 × 2) (4)

4.5
- Electronic card reader on doors
- Keypad on doors
- Biometric logon for systems
- Security access control (Any 2 × 2) (4)

4.6
- Data can be stolen.
- Data can be lost.
- Data can be tampered with.
- Data can be deleted. (Any TWO) (2)

4.7
- Internal threats refer to threats that occur from within the organisation.
- External threats refer to threats that occur from outside the organisation.

(2 × 2) (4)

4.8
- Software can be used to ensure the accuracy of data input.
- Users can select from drop-down lists to avoid input errors. (Any 1 × 2) (2)

4.9
- Assists in lesson delivery
- Assists in research
- Saves space
- Faster access to information
- Enables remote learning (Any 3 × 2) (6)

[30]

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QUESTION 5

5.1
- The abacus is used by sliding beads across the rod.
- The beads are counted and used for computation. (4)

5.2
- A laptop has more processing power than a tablet.
- A tablet is smaller than a laptop.
- A laptop can run off electricity and battery.
- Tablets use touch screens for input. (Any 2 × 2) (4)

5.3
- End user
- Power user
- Expert user (3 × 2) (6)

5.4
- Smart board
- Scanners to monitor vehicles in and out of campus
- Automatic gates
- Automatic lighting
- Biometric access control (Any TWO) (2)

5.5 Multi-core processor (2)

5.6 5.6.1
- Input peripherals are used to enter data into the computer.
- Output peripherals are used to output data to a user. (2 × 2) (4)

5.6.2
- Hard drive
- Magnetic tape drive
- Solid-state drive (Any ONE) (1)

[23]

QUESTION 6

6.1

ADVANTAGES	DISADVANTAGES
• Information can be found fast. • All information is stored in one place. • Computers are efficient. • Computers allow for global communication. (Any 2 × 2)	• If the source of data is inaccurate, the output will be inaccurate too. • If one part on the computer breaks, the entire system will need to be sent for repairs. • Computers can be expensive. • Digital crimes are committed using computers. (Any 2 × 2)

(8)

6.2 6.2.1
- Mouse
- Keyboard
- Monitor/Screen (3 × 2) (6)

6.2.2
- Increase the random access memory
- Increase the main memory (Any 1 × 2) (2)

6.2.3 Multifunction printer (MFP) (2)

6.3 A smart terminal (2)

6.4
- A smart terminal has a built-in processor and its own memory.
- It collects the data, which are then sent to a central computer for processing. (2 × 2) (4)

6.5 6.5.1
- A – Function keys
- B – Numeric keypad
- C – Direction arrows
- D – Typing keys (4 × 2) (8)

6.5.2 F1 (2)

6.5.3 Delete (2)

6.5.4 Home (2)

6.6
- Voice recognition systems accept voice input by the user.
- The commands are processed
- and carried out by the device as an instruction. (3)

6.7
- IOS – Siri
- Android – Google Now/Google Assistant (2)

6.8
- Android
  - "Hey Google"
  - "Open Gmail"
  - "Call 'contact name'"
- IOS
  - "Open Control Centre"
  - "Go home"
  - "Tap 'item name'"
  - "Open 'app name'"
  - "Take screenshot"
  - "Turn up volume"

(Any ONE) (1)

6.9
- Do not drop the device.
- Do not expose the device to heat or cold.
- Safely remove the device from the computer.
- Scan the drive for errors.

(Any 2 × 2) (4)

6.10
- A – Platter
- B – Needle/Head

(2 × 2) (4)
[52]

TOTAL SECTION B: 150
GRAND TOTAL: 200

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