higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

INTRODUCTION TO COMPUTERS
NQF LEVEL 2

2 March 2020

This marking guideline consists of 6 pages.

Copyright reserved

QUESTION 1

1.1 1.1.1

A	B	$\overline{A + B}$	
0	0	1	✓
0	1	0	✓
1	0	0	✓
1	1	0	✓

(4)

1.1.2

A	B	A + B	
0	0	0	
0	1	1	✓
1	0	1	✓
1	1	1	✓

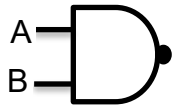
(3)

1.1.3

A	$\overline{A}$	
0	1	✓
1	0	✓

(2)

1.2



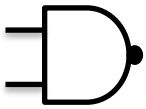
(3)

1.3



(2)

1.4



(2)

1.5 A data bus is a system within a computer or device, consisting of a connector or set of wires, that provides transportation for data. (2)

[18]

QUESTION 2

2.1 True
2.2 True
2.3 True
2.4 False
2.5 True

(5 × 1) **[5]**

QUESTION 3

3.1
- Screen/Monitor
- Speakers
- Projector
- Printer
- Plotter (5)

3.2
- Bit is a binary digit that can be represented by either 1 or 0.
- A byte is a set of eight bits that represent a single character in the computer's memory. (2)

3.3
- Mechanical
- Optical (2)

3.4
- Controller – a mechanism that controls the operation of a process or a certain device.
- Process – a device, either a motor or a robot, in use.
- Sensor – a device that reacts to a change in state. (3 × 2) (6)

3.5 3.5.1
- CD-R/CD-RW
- DVD-R/DVD-RW (2)

3.5.2 4.7 GB (1)

3.5.3 Liquid crystal display (1)

3.6
- Coaxial cable
- Twisted pair cable
- Fibre optical cable (3)

3.7
- A star topology is a network setup in which each of the devices and computers connect to a central hub, switch or router.
- Bus topology is a network setup in which each of the computers and devices are connected to a single cable.
- Ring topology is a network topology in which each node connects to exactly two other nodes. (3)

3.8
- Avast!
- Panda Cloud
- Microsoft Security Essentials
- Avira
- AVG
- Kaspersky
- Comodo
- Immunet
- PC Tools (Any 3 × 1) (3)

3.9
- Video card
- Sound card
- Printer card
- Network card (Any 2 × 1) (2)

[30]

QUESTION 4

4.1
- Cold boot means to start up a computer that is turned off.
- Warm boot refers to restarting a computer once it has been turned on. (4)

4.2
- VGA
- DVI (2)

4.3 4.3.1 Protocol is a set of rules which enables computers to communicate with each other on the network.

4.3.2
- Router connects different sub networks to another sub networks to a larger network, the internet.
- Allows traffic to pass through its WAN port. (Any ONE)

4.3.3
- Modems connect devices to the internet.
- A modem is a network hardware device that modulates one or more carrier wave signals to encode digital information for transmission. (Any ONE)

(3 × 2) (6)

4.4 C (1)

4.5 Basic input/output system (1)

4.6 4.6.1
- Word processing
- Spreadsheet
- Power Point
- Database
- Pastel (Any 3 × 1) (3)

4.6.2 .doc
.docx (Any ONE) (1)

4.7 4.7.1 To cut selected objects or text
4.7.2 To paste copied or cut objects or text

(2 × 1) (2)

[20]

QUESTION 5

5.1
- Printer completely dead
- Power light off/LED dead
- Printer offline/network connection
- Not printing/printing queue
- Print quality is poor/low on ink (5)

5.2 PC hardware diagnostic tool (1)

5.3 What You See Is What You Get (1)

5.4 CTRL + N (1)

5.5
- Use the space bar to enter a soft space
- Use the tab key to make hard space (2)

5.6
- Left align
- Centred
- Right align (3)

5.7
- Accounting firms
- Business firms
- Manufacturing
- Schools
- Sports
- Engineering (Any 4 × 1) (4)

[17]

QUESTION 6

6.1 A web page is an electronic document while a website is a collection of web pages linked together and stored on a web server. (2)

6.2
- Google.com
- Bing.com
- Yahoo.com
- Ask.com
- AOL.com
- Baidu
- Wikipedia.com (Any 3 × 1) (3)

6.3 Internet service provider (1)

6.4
- A protocol
- Domain name (2)

6.5	6.5.1	World wide web		
	6.5.2	Post office protocol		
			(2 × 1)	(2)
				[10]
			TOTAL:	**100**

Copyright reserved