higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

COMPUTER PRINCIPLES N4

18 November 2024

This marking guideline consists of 5 pages.

Copyright reserved

QUESTION 1

1.1 A
1.2 C
1.3 D
1.4 C
1.5 C
1.6 C
1.7 A
1.8 C
1.9 B
1.10 C

(10 × 1) **[10]**

QUESTION 2

2.1 Punched cards
2.2 Printer output
2.3 Output devices
2.4 Input devices
2.5 Control element
2.6 Terminals
2.7 Core memory
2.8 Memory
2.9 Magnetic tape
2.10 Magnetic disk

(10 × 1) **[10]**

QUESTION 3

3.1 I
3.2 G
3.3 F
3.4 B
3.5 D
3.6 A
3.7 J
3.8 C
3.9 H
3.10 E

(10 × 1) **[10]**

Copyright reserved

QUESTION 4

4.1 False
4.2 True
4.3 True
4.4 True
4.5 True

(5 × 1) **[5]**

QUESTION 5

5.1 Machine 1 (1)

5.2
- Better processor
- Better operating system
- More RAM (3)

5.3 Machine 2 (1)

5.4 One does not need a high-spec machine for an internet café. (2)

5.5 5.5.1 Internet service provider (1)

5.5.2 A router is a communications device✓ that is used to connect one or more networks together✓ and allows the secure transmission of data between the networks.✓ (3)

5.6 5.6.1 Fibre optic (1)

5.6.2 UTP can only be used for up to 100 m whereas fibre optic cable can be used easily to cover the 150 m. (2)

5.6.3
- Faster
- More secure
- More reliable (3)

5.7 5.7.1 Plug and play is a technology which allows for the easy and automatic configuration of a hardware device. (2)

5.7.2 A driver is software✓ that acts as the interface✓ between the hardware and the operating system.✓ (3)

[22]

Copyright reserved

QUESTION 6

6.1 The `LET` statement is used to assign a value to a variable. (2)

6.2 Use the command `PRINT "Hello, World!"`. (2)

6.3 One can concatenate two strings using the `+` operator. (2)

6.4 The `MOD` operator is used to find the remainder of a division operation. (2)

6.5 `ON ERROR GOTO` is used to handle errors by directing the program flow to a specific line or label when an error occurs. (2)

6.6 `DIM` is used to declare arrays or variables, especially when specifying the size of arrays. (2)

6.7 One can use the `EXIT DO` statement to terminate a `DO...LOOP` prematurely. (2)

6.8
- One can create an infinite loop using `DO...LOOP` without specifying an exit condition.
- One can create an infinite loop using `FOR...NEXT` where the exit condition is never met. (2 × 2) (4)

6.9 `DO...LOOP` allows for indefinite repetition based on a condition, whereas `FOR...NEXT` loops a set number of times. (4)

[22]

QUESTION 7

7.1 Ventilation prevents overheating, which can damage electronic equipment. (2)

7.2 Improper humidity levels may cause condensation or static electricity, both of which may damage computer components. (2)

7.3 Eating in a computer room may lead to spills or crumbs that may damage equipment. (2)

7.4 Static electricity may damage sensitive electronic components through electrostatic discharge. (2)

7.5 Use anti-static mats, wrist straps, and maintain proper humidity levels to reduce the risk. (2)

7.6 Dry air increases the likelihood of static electricity buildup, which may harm electronics. (2)

7.7 Anti-static mats
Wrist straps (Any ONE) (1)

Copyright reserved

7.8 Controlling the environment, including ventilation, humidity and cleanliness, is essential to protect electronic equipment from damage. (2)
[15]

QUESTION 8

8.1 Logical error (1)

8.2 Syntax error (1)

8.3 Syntax error (1)

8.4
- Syntax error
- Runtime error
- Logical error (3)

[6]

TOTAL: 100

Copyright reserved