

QUESTION 1.



4 Four statement types and four examples are shown below.

Draw a line to connect each statement type to the correct example.

Statement type	Example
Assignment	FOR X ← 1 TO 10
Iteration	READ X
Input	PRINT X
Output	X ← Y + Z

[3]

5 A programmer writes a program to store a patient's temperature every hour for a day.

State the data structure that would be most suitable to use and give the reason for your choice.

Data structure

Reason.....

.....[2]

6 Identify **two** different selection statements that you can use when writing pseudocode.

1

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2

.....[2]



Question 7 begins on page 10.

QUESTION 2.

Section B



2 Most programming languages include basic data types. Ahmad is describing the basic data types he has used.

State the data type that Ahmad is describing in each sentence.

Choose the data type from this list of programming terms.

- Array
- Boolean
- Char
- Constant
- Function
- Integer
- Iteration
- Procedure
- Real
- String
- Variable

A number with a fractional part that can be positive or negative and used in calculations

Data type

A whole number that can be positive, negative or zero and used in calculations

Data type

A single number, symbol or letter

Data type

A sequence of characters

Data type

A data type with two values, True or False

Data type

QUESTION 3.



4 Four validation checks and four descriptions are shown.

Draw a line to connect each validation check to the correct description.

Validation Check	Description
Range check	Checks that some data is entered.
Presence check	Checks for a maximum number of characters in the data entered.
Length check	Checks that the characters entered are all numbers.
Type check	Checks that the value entered is between an upper value and a lower value.

[3]

5 A programmer writes a program to weigh baskets of fruit in grams, keeping a total of the weight and counting the number of baskets. The total weight is stored in a variable `Total` and the number of baskets is stored in a variable `BasketCount`.

Explain, including examples of programming statements, how totalling and counting could be used in this program.

Totalling

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Counting

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[4]