

- 3 Tick (✓) **one** box to identify the operator that returns the quotient of a calculation with the fractional part discarded.

A / ☐

B DIV ☐

C ^ ☐

D MOD ☐

[1]

- 1 Tick (✓) **one** box to complete this sentence.

The result of the arithmetic operation $4 \wedge 2$ is

A 2 ☐

B 8 ☐

C 16 ☐

D 42 ☐

[1]

- 3 Tick (✓) **one** box to identify the most appropriate data type to store 'M'

A integer ☐

B char ☐

C real ☐

D Boolean ☐

[1]

5 Two library routines used in programming are MOD and DIV.

State the purpose of each of the library routines.
Give **one** example pseudocode statement for each of the library routines.

MOD purpose

.....

Example pseudocode

.....

DIV purpose

.....

Example pseudocode

.....

[4]

2 Tick (✓) **one** box to complete this sentence.

A pseudocode example of a selection statement is

- A

CALL Sorting(Value1, Value2)

☐
- B

DECLARE Count : INTEGER

☐
- C

IF X = 7 THEN Y ← 21 ENDIF

☐
- D

WHILE X <> -1 DO

☐

[1]

3 State what is meant by the data types integer and real.
Give an example of each.

Integer

.....

Example

Real

.....

Example

[4]

5 A high-level programming language makes use of arithmetic, Boolean and logical operators.

State how each type of operator is used.
Give an example statement, in pseudocode, for each one.

Arithmetic

.....

Example

.....

Boolean

.....

Example

.....

Logical

.....

Example

.....

[6]

3 Describe the characteristics of the string and char data types and give an example of each.

String

.....

Example

Char

.....

Example

[4]

7 (a) The string operation `SUBSTRING(FullText, X, Y)` returns a string from `FullText` beginning at position `X` that is `Y` characters long. The first character in `FullText` is in position 1.

Write the pseudocode statements to:

- store the string “IGCSE Computer Science at Cambridge” in `FullText`
- extract and display the words “Computer Science” from the string and store it in a suitable variable
- output the original string in upper case.

[4]

(b) Write the pseudocode statements to:

- store the content of the variable you created in part **(a)** to a text file named "Subjects.txt"
- close the text file at the end of the algorithm.

..... [3]

6

[4]

5

..... [3]

8

..... [4]