3 The purpose of this pseudocode algorithm is to carry out a bubble sort to sort, in descending order, 1000 numbers stored in a one-dimensional (1D) array.

```
01 DECLARE Values : ARRAY[1:1000] OF REAL
02 DECLARE Index : CHAR
03 DECLARE Stop : BOOLEAN
04 DECLARE Hold : REAL
05 Stop ← FALSE
06 WHILE NOT Stop DO
07     Stop ← FALSE
08     FOR Index ← 1 TO 50
09         IF Values[Index + 1] > Values[Index]
10           THEN
11             Hold ← Values[Index]
12             Values[Index] ← Values[Index + 1]
13             Values[Index + 1] ← Hold
14             Stop ← FALSE
15         ENDIF
16     NEXT Index
17 NEXT Stop
```

(a) Identify the line numbers of **four** errors in the pseudocode and suggest a correction for each error.

Error 1 line number .....

Correction .....

.....

Error 2 line number .....

Correction .....

.....

Error 3 line number .....

Correction .....

.....

Error 4 line number .....

Correction .....

.....

[4]

(b) The swap section in lines 11 to 13 of the existing code are to be changed to a call statement for a procedure. This procedure will include two parameters representing the indexes of the array elements to be swapped.

(i) Complete the pseudocode for `PROCEDURE Swap`

```
PROCEDURE Swap(.....)
    DECLARE Hold : REAL
    Hold ← Values[.....]
    .....
    .....
ENDPROCEDURE
```

[4]

(ii) Write the pseudocode to transfer control to `PROCEDURE Swap`

.....

..... [2]

(c) Explain the difference between global variables and the variable declared in **3(b)(i)**.

.....

.....

.....

..... [2]