

11. (a) Rewrite the following fragment of code using the control structures below.

```
For count := 1 to 10 DO
Begin
    read (count) ;

End;
```

(i) While loop (4 marks)

(ii) Repeat Loop (4 marks)

- (b) Complete the following two sentences by replacing the letters A, B, C, D and E with the appropriate programming terms.

Shadwayne (A) the program to see if it was grammatically correct, meaning no (B) errors, that it did what it was intended to do, meaning no (C) errors, and that it produced some results, meaning no (D) errors. If there were errors, he would then (E) the program to locate and correct these errors. (5 marks)

- (c) THREE of the following statements describe external documentation. Identify them and write the corresponding numbers in your answer booklet.

D1: Includes frequently asked questions

D2: Makes it easier to read and understand the program

D3: States the version of the program and the installation procedure

D4: Suggests how users should use the program such as starting or exiting the program

D5: Use of indentation (2 marks)

Total 15 marks

GO ON TO THE NEXT PAGE

CSEC Information Technology

Paper 02

Question 11

The responses in these two exemplars showed clearly that the candidates had a clear understanding of this aspect of the syllabus. They were therefore awarded full marks.

Comments

For Part (a), both candidates wrote programs which showed the correct use of the Loop constructs namely

1. accurate initialization of variable
2. precise loop condition
3. correct placement of increment statement within the loop.

For Part (b), programming errors were properly identified.

For Part (c), external documentation was accurately selected.

Exemplar #1

11. a) i) While loop

count := 1;

While count ≤ 10 Do

Begin

read (count);

count := count + 1;

End;

ii) Repeat until -loop

count := 1;

Repeat

Begin

read (count);

count := count + 1;

End;

UNTIL count > 10;

Write the
question
number in
this column.

Do
not
write
in
this
margin

11b) A - compiled

B - syntax

C - logic

D - run-time

E - debug

c) D1

D3

D4

~~12/1/19~~
~~12/1/19~~
~~12/1/19~~

Exemplar # 2

(c) Question 11

(a) (i) count := 1;

WHILE count ≤ 10 DO

Begin

read(count);

count := count + 1;

End;

(ii) count := 1;

REPEAT

Begin

read(count);

count := count + 1;

~~UNTIL count > 10~~

End;

UNTIL count > 10;

Write the
question
number in
this column.

Do not
write
in this
margin

11. (b) A - ~~compiled~~ run

B - syntax

C - logic

D - run-time

E - debug

(c) D1, D3, D4.