

TAKEN FROM 2006

Answer ALL questions.

13. Explain the difference between EACH of the following pairs of terms:

- (a) Machine language and high level language
- (b) Second generation and fourth generation languages
- (c) Pseudocode and trace table
- (d) Input and output

(8 marks)

Total 8 marks

14. Consider the following segment of code:

Read X, Y

While (X <> Y) DO

 Print Y

 Y = Y + 1

Print Y

(a) Explain what is meant by:

(i) <>

(ii) Y=Y +1

(3 marks)

(b) Write an example of a variable from the above segment of the code.

(1 mark)

(c) Use a trace table to determine the output of the code if X=4 and Y=2. Use the headings

X Y Print Y

(3 marks)

Total 7 marks

15. Explain what is meant by EACH of the following:

- (a) Object code
- (b) Executing
- (c) Test data
- (d) Syntax error
- (e) Dry run
- (f) Debugging

(6 marks)

Total 6 marks

16. Write an algorithm to perform the following sequence of tasks:

- (i) Read a number NUM, and a letter LET
- (ii) Add 5 to the number NUM and place the result in ANS
- (iii) If LET is equal to 'A', then subtract 4 from the number NUM and place the result in ANS
- (iv) Print the results of NUM and LET.

(5 marks)

Total 5 marks

17. Copy the labels EX1, EX2, EX3 and EX4 on separate lines on your answer book. Then, write the corresponding example, Name 1 to Name 4, which matches the appropriate label.

EX1: IF weather = 'SUNNY' Then SMILE

EX2: While (ANSWER='Y') DO

Print 'Yes'

EX3: hours > 12

EX4: Grade = Grade + 5

Name1: a logical operation

Name2: an arithmetic operation

Name3: conditional statement

Name4: a loop

(4 marks)

Total 4 marks

END OF TEST