

- (20%) 1. 試說明 DOS 與 Windows 的意義？並從“功能面”與“使用面”的觀點評析之。
- (10%) 2. 試說明 call by value 與 call by address 的意義？並舉例說明。
- (10%) 3. 說明 Compiler 與 Interpreter 之意義與異同。
- (10%) 4. Andy's Hamburger Chain has received the following table of data concerning the number of hamburgers sold in the three cities.

City	Main	Branch
New York	7005	8050
Chicago	7702	6506
Houston	2311	3207

Assume that the data have been read and stored as a 3X2 array, explain your algorithm and then write a program to help Andy find out how many hamburgers were sold in each city. The output should list the cities and the total number of hamburgers sold in each city.

- (50%) 5. 是非題 (每題 2 分, 每錯一題, 倒扣 1 分; 對打○, 錯打×)
1. If one subroutine calls a second subroutine, the first must appear in the program before the second.
  2.  $(A+B)^{0.5}$  and  $(A+B)^{1/2}$  have the same result.
  3. The contents of a sequential file can be displayed in a readable form by using the DOS command TYPE.
  4. These two logical expressions are equivalent:  
NOT(A=1 AND B=2)  
A<>1 OR B<>2
  5. Some loops must be coded by using the FOR and NEXT statements.
  6. The statement LET G=5 may appear in a program that contains the statement DIM G(100).
  7. The statement  
80 IF A=B THEN PRINT A : C=C+1  
is equivalent to the two statements  
80 IF A=B THEN PRINT A  
81 C=C+1

(背面仍有題目,請繼續作答)

8. The program statement  
20 PRINT "13(2+3)=500"  
contains a syntax error.
9. The GOSUB statement is really unnecessary, since the GOTO statement will accomplish the same thing.
10. At most one data file can be referenced in a program, that is one input data file or one output data file.
11. Subroutines should be used only when a group of statement is to be performed more than once.
12. The statement  
95 IF X>0 THEN PRINT "Y" ELSE PRINT "N"  
is equivalent to the two statements  
95 IF X>0 THEN PRINT "Y"  
96 IF X<=0 THEN PRINT "N"
13. If array A and B are declared by using DIM A(20), B(20), then the statement LET A=B will replace all entries (values) of A by the corresponding entries of B.
14. The statement FOR X=Y TO Z STEP W contains a syntax error.
15. A program must contain exactly the same number of WHILE statements as WEND statements.
16. Whatever information is stored in the PC's RAM is lost when the power to the PC is cut off.
17. Subroutines can be useful even if their purpose is to improve a program's readability.
18. Execution of the two lines  
200 LET S=2.1  
201 ON S GOTO 300, 400, 500  
will necessarily result in an error.
19. In the statement FOR N=5 to 200 STEP C, C must be a positive integer.
20. At most two data files can be referenced in a program, that is one input data file and one output data file.
21. The statement LET A(7) = 25 can never cause an error message to be displayed.
22. The only difference between sequential files and random files is that data in sequential files must be read in order, whereas data in random files can be read in any order.
23. A BASIC program written to solve a particular problem is called a systems program.

24.  $1.0E1 = 10$ .

25. The programming line

50 LET A(I)=7

can cause an error message to be displayed.