國立中山大學 111 學年度
學士後醫學系招生考試試題

科目名稱：計算機概論與程式設計

※選擇題(單一選擇題，共 90 題，總分 150 分)
壹、第 1~30 題每題 1 分，共 30 分，每題答錯倒扣四分之一。

1. Which of the following is the binary representation of $(6.625)_{10}$?
   A. 101.101
   B. 101.11
   C. 110.101
   D. 110.11
   E. 111.11

2. If you have a disk that has a capacity of Petabyte (PB), that is equal to
   A. 2 to the 20th power of bytes
   B. 2 to the 30th power of bytes
   C. 2 to the 40th power of bytes
   D. 2 to the 50th power of bytes
   E. 2 to the 60th power of bytes

3. How many bits in length are used for IP address in IPv4?
   A. 4
   B. 8
   C. 16
   D. 32
   E. 64

4. Which of the following statement about the Unicode is not true?
   A. An extended version of the ASCII
   B. It contains 256 characters
   C. It is not only for English but also international use
   D. It is designed to be a superset of ASCII
   E. Each character is encoded with 16 bits

5. Three security goals are _____.
   A. Confidentiality, cryptography, and nonrepudiation
   B. Confidentiality, encryption, and reliability
   C. Confidentiality, integrity, and availability
   D. Confidentiality, denial of service, and masquerading
   E. Reliability, nonrepudiation, and masquerading

6. If the longest path in a binary tree contained exactly four nodes, what is the minimum number of nodes that could be in the entire tree?
   A. 4
   B. 5
   C. 7
   D. 8
   E. 15

7. Which of the following data structures is static in the sense that it does not change size as data items are inserted or deleted?
   A. Array
   B. Singly linked list

    C. Queue
    D. Stack
    E. Tree

8. Which one of the following is NOT the characteristic of TCP protocol?
    A. Connection-oriented
    B. Connectionless
    C. Congestion control
    D. Error control
    E. 3-way handshaking

9. Which of the following methods is suitable for preventing the falsification of medical records?
    A. Natural Language Process
    B. Neural Network
    C. Blockchain
    D. Information Retrieval
    E. Data Compression

10. The digital transformation of smart medical has always been a hot topic and paid more attention in the post-epidemic era. Which of the following falls within its scope?
    A. Interactive health education
    B. Precision medicine
    C. Telemedicine
    D. Smart long-term care medical
    E. All of the above

11. Which of the following is used to store the instruction currently being executed?
    A. Program counter
    B. Cache memory
    C. Instruction register
    D. Program register
    E. CPU

12. x = 01001010, y = 11001100. What is the Hamming distance between x and y?
    A. 3
    B. 65
    C. 130
    D. 148
    E. 278

13. Which one of the following is an unsupervised learning method?
    A. K-means
    B. Support vector machine (SVM)
    C. Decision Tree
    D. Regression
    E. KNN

14. (a) System Program, (b) Application Program, (c) Operating System, and (d) CPU, can be arranged in order of proximity to the user. Which of the following order is correct?
    A. a, b, c, d

    B. d, c, b, a
    C. b, a, c, d
    D. c, a, b, d
    E. None of the above

15. Which of the following statement about GPU is not true?
    A. GPU stands for graphic processor unit
    B. GPU is a separate computer and can be more powerful than CPU
    C. Modern GPUs are very efficient at manipulating computer graphics and image processing
    D. GPU usually has less cores than CPU
    E. GPUs are used in embedded systems, personal computers, workstations, and game consoles

16. If the function `int volume(int x = 1,int y = 1,int z = 1);` is called by the expression `volume(7,8)`, how many default arguments are used?
    A. None.
    B. One.
    C. Two.
    D. Three.
    E. It depends on the runtime environment.

17. If `a=1.0, b=6.0` and `c=4.0`, then what is printed by
    `printf("%.2f", sqrt(a+b*c));`
    A. 25
    B. 5.00
    C. 5
    D. 25.00
    E. 10.00

18. Which of the following C code is used to declare a two-dimensional array of integers with 5 rows and 3 columns?
    A. `int data[5,3];`
    B. `int data[5][3];`
    C. `int data[5×3];`
    D. `int data[5] ×[3];`
    E. None of the above

19. What is the output of the following statements?
```
    int x = 3;
    switch(x+1) {
      case 3:
        printf("3 ");
      case 4:
        printf("4 ");
      case 5:
        printf("5 ");
        break;
      case 6:
        printf("6 ");
      default:
```

```
    printf("X");
}
```
A. 3 4 5 6 X
B. 4 5 6 X
C. 5 6 X
D. 4 5 6
E. 4 5

20. Which following is the correct way to create a dictionary in Python?
A. `students = {'name'=>'alice'; 'score'=>60}`
B. `students = {'name'='alice'; 'score'=60}`
C. `students = {'name':'alice'; 'score':60}`
D. `students = {'name'=>'alice', 'score'=>60}`
E. `students = {'name':'alice', 'score':60}`

21. What is the output of this code in Python?
```
list = ['a', 'b', 'c', 'd', 'e']
print(list[1:])
```
A. `[]`
B. `['b']`
C. `['a','b']`
D. `['b','c','d','e']`
E. None of these

22. What does the following Python program fragment do?
```
s=0
for i in range(3,10):
    s+=i
print(s)
```

A. Calculate the sum of $1 + 2 + \ldots + 10$
B. Calculate the sum of $1 + 4 + 7 + 10$
C. Calculate the sum of $3 + 4 + 5 + 6 + \ldots + 9$
D. Calculate the sum of $3 + 4 + 5 + 6 + \ldots + 10$
E. Calculate the sum of $0 + 2 + 4 + 6 + \ldots + 10$

23. Which of the following statements about the format specifier for **printf()** function in C is incorrect?
A. %b is used to print a binary number
B. %d is used to print a decimal number
C. %x is used to print a hexadecimal number
D. %f is used to print a floating number
E. None of the above

24. Consider an array declaration 「`int data[5]={1,2,3,4,5};`」 in C. What is the value of `data[5]`?
A. 0

B. 5
C. 6
D. 12345
E. None of the above

25. Which of the following C code is used to declare two pointers of integer?
    A. `int *p,q;`
    B. `int *p,*q;`
    C. `int *(p,q);`
    D. `(int *) p,q;`
    E. None of the above

26. Which of the following code could not be used to ignore all remaining characters in the current input line?
    A. `do {scanf("%c", &ch);} while (ch !='\n');`
    B. `do {ch = getchar();} while (ch !='\n');`
    C. `while ((ch=getchar())!='\n');`
    D. `while (getchar()!='\n');`
    E. None of the above.

27. What is the output of the following program?
```
int a[10] = {3,2,3,4,5,4,7,1,3,2};
int b[10] = {0,0,0,0,0,0,0,0,0,0};
for(i = 0; i < 10; i=i+1)
   b[a[i]-1] = b[a[i]-1] + 1;
printf("%d", b[2] );
```
    A. 3
    B. 1
    C. 2
    D. 4
    E. 5

28. What is the output of this code in python?
```
r = lambda q: q * 2
s = lambda q: q * 3
x = 2
x = r(x)
x = s(x)
x = r(x)
print (x)
```
    A. 2
    B. 4
    C. 6
    D. 12
    E. 24

29. What is the output of this code in C++?
```
#include<iostream>

using namespace std;
```

```cpp
class Constructor1 {
public:
    Constructor1()
    { cout << "constructor1 called" << endl; }
};

class Constructor2 {
public:
    Constructor2()
    { cout << "constructor2 called" << endl; }
};

class Derived: public Constructor1, public Constructor2 {
public:
    Derived()
    { cout << "Derived's constructor called" << endl; }
};
int main()
{
    Derived d;
    return 0;
}
```

A. constructor1 called
constructor2 called
Derived's constructor called

B. constructor2 called
constructor1 called
Derived's constructor called

C. Derived's constructor called

D. Compile error

E. None of the above

30. Assuming that **t** is an array and **tPtr** is a pointer to that array, which expression refers to the address of element 5 of the array?
    A. *(tPtr+5)
    B. tPtr[5]
    C. t+5
    D. *(t+5)
    E. &t[5]

貳、第 31~90 題每題 2 分，共 120 分，每題答錯倒扣四分之一。

31. Which of the following network attacks is threatening integrity?
    A. Man-in-the-middle
    B. Denial of service
    C. Packet sniffing
    D. Keylogger
    E. SYN flood attack

32. Which of the following is NOT a necessary condition for deadlock?
   A. Circular wait
   B. Convey effect
   C. Hold and wait
   D. Mutual exclusion
   E. No preemption

33. Which one of the following operations is not performed by ALU (Arithmetic/Logic Unit)
   A. AND
   B. OR
   C. Circular shift
   D. Jump
   E. Addition

34. What is the smallest negative number using 1's complement in a 64-bits computer?
   A. -2^{63}
   B. $-(2^{63} - 1)$
   C. -2^{64}
   D. $-(2^{64} - 1)$
   E. None of the above

35. The widest range of free software licenses available under license terms approved by the Free Software Foundation and the Open Source Software Community. Which of the following statements is inappropriate?
   A. The GNU GPL can protect the rights of software publishers.
   B. Guaranteed freedom for end users (individuals, organizations, businesses) to operate, learn and share.
   C. Claim the copyright of the software, provide a license to give legal permission to copy, distribute and/or modify.
   D. Guarantee that the end user cannot modify the software.
   E. Claim the copyright of the software, provide a license to give legal permission to modify.

36. Which of the following is an appropriate statement about the Python language?
   A. The Object-oriented programming (OOP) is supported, and procedure-oriented programming (POP) is supported.
   B. OOP is supported and the POP is not supported.
   C. OOP is not supported and POP is supported.
   D. OOP is not supported and POP is not supported.
   E. None of the above

37. Which of the following statement about recursive functions is true?
   A. **for** or **while** architectures are generally used
   B. Fewer local variables than the equivalent nonrecursive routine
   C. Used to reduce the execution time
   D. Recursion is another name for iteration
   E. None of the above

38. Given a row-major array A(i,j) is defined as $-2 \le i \le 6$, $-6 \le j \le -2$, where the location of A(2,-4) is 100 as the base address and the location of A(4,-3) is 122.
   Which of the following is the correct storage size for an element stored in the array?

A. 1
B. 2
C. 3
D. 4
E. None of the above

39. According to Amdahl's Law, what is the speedup gain for an application that is 60% parallel and we run it on a machine with 6 processing cores (compared to the machine with 1 core)?
A. 1.2
B. 2
C. 2.5
D. 3.6
E. 6

40. Given the relation below

X:	A	B	C
	2	5	7
	3	3	6
	4	4	2
	6	2	2

what values will be retrieved by the following SQL statement?
SELECT A, B FROM X WHERE X.B = X.C
A. 2, 2
B. 2, 5
C. 3, 3
D. 3, 6
E. 6, 2

41. Which of the following bit patterns violates odd parity check?
A. 00011111
B. 01010101
C. 01100111
D. 10000000
E. 10100001

42. Which one of the following is a loopback address?
A. 127.0.0.1
B. 255.255.255.255
C. 0.0.0.0
D. 168.5.16.8
E. 224.3.16.8

43. Which one of the following is NOT considered as a basic concept in object-oriented programming (OOP)?
A. Parallelism
B. Inheritance
C. Encapsulation
D. Polymorphism
E. Data abstraction

44. An image can be represented in HSV color space. Here 'V' means
    A. Hue
    B. Saturation
    C. Brightness
    D. Color intensity
    E. None of the above

45. In machine learning, when the result of testing error is significantly larger than the training error, it is called
    A. Underfitting
    B. Overfitting
    C. Oversampling
    D. Training bias
    E. None of the above

46. Which of the following statements is incorrect for the transport layer?
    A. TCP is a reliable and connection-oriented protocol
    B. TCP uses the IP address
    C. UDP is not a reliable and connection-oriented protocol
    D. UDP does not uses the IP address
    E. None of the above

47. Which of the following statements is incorrect for the Ransomware?
    (a) It is a type of denial-of-service attack
    (b) It will encrypt the files to prevent the access
    (c) It will lock the computer to prevent the normal usage
    (d) It often uses phishing as an entry point
    A. (a)
    B. (b)
    C. (c)
    D. (d)
    E. (b), (d)

48. Which of the following data structures is in LIFO (Last In First Out) order?
    A. Array
    B. General Array
    C. Stack
    D. Queue
    E. Double Queue

49. If users including individuals, organizations, and enterprises can obtain computing, computing power, and shared software and hardware resource application services through the Internet, which of the following computing modes belong to the above statements?
    A. Client/server
    B. P2P
    C. Broadband
    D. Decentralized
    E. Cloud

50. In application layer protocols including HTTP, SMTP, and FTP, what mechanism is usually used to translate the host name provided by the user into an IP address?
    A. FTP
    B. Database
    C. DNS
    D. IMAP
    E. None of the above

51. Assume the execution time of a running program is $50(\log n^2) + 8$, then what is the most suitable time complexity?
    A. $O(\log n^2)$
    B. $O((\log n)^2)$
    C. $O(\log n)$
    D. $O(n)$
    E. $O(n^2)$

52. According to the definition of the major topics of information ethics, "When can information be used for free? Under what circumstances should it be used with a payment or with the consent of the owner?" What does this statement mean?
    A. Accessibility
    B. Accuracy
    C. Privacy
    D. Property
    E. None of the above

53. Which of the following statement is not the responsibility of an operation system?
    A. Communicate with the computer user
    B. Manage allocation of memory
    C. Collect input from input device
    D. Execute the program
    E. Convey program output to the output device

54. Which of the following data type conversion may result in data loss?
    A. `float` to `double`
    B. `int` to `char`
    C. `short` to `long`
    D. `int` to `float`
    E. `bool` to `char`

55. Which of the following statement is true?
    A. A NOT gate accepts two inputs
    B. The output of an XOR gate is 0 unless both inputs are 1
    C. The sum of two binary digits (ignoring the carry) is expressed by an OR gate
    D. The NOR gate produce the opposite results of the XOR gate
    E. Inverting the output of an AND gate is equivalent to inverting the individual signals first, then passing them through an OR gate

56. Which of the following is NOT essential for a time-sharing operating system?
    A. Interrupt vectors
    B. Privileged instructions

    C. Memory protection
    D. Virtual memory
    E. Dual mode processor state

57. Which of the following definition is not true?
    A. The Turing Test is based on whether a computer could fool a human into believing that the computer is another human being
    B. A computer system that can pass the Turing test is considered to be intelligent
    C. Each element in an artificial neural net is affected by a numeric weight
    D. Each human has a unique voiceprint that can be used to train voice recognition systems
    E. None of the above

58. Which one of the following methods is NOT considered as a solution for preventing the overfitting problem in AI training?
    A. Collect more training data
    B. Use regularization
    C. Increase model complexity
    D. Data augmentation
    E. Use ensemble method

59. Given a postfix expression is **abcde*-*fg/+=**, where b=2, c=3, d=4, e=5, f=6, and g=3. Which of the following is the value of a?
    A. 31
    B. -31
    C. 32
    D. -32
    E. None of the above

60. Which of the following statement about sorting algorithm is not true?
    A. A sorting algorithm puts elements of a list into an order
    B. For Quick sort, the average complexity is $n \log n$ to sort n elements
    C. For Bubble sort, the average complexity is n^2 to sort n elements
    D. For Insertion sort, the average complexity is n^2 to sort n elements
    E. For Selection sort, the average complexity is $n \log n$ to sort n elements

61. Which of the following is not a correct way to initialize an array?
    A. `int n[5]={0, 1, 2, 3, 4, 5};`
    B. `int n[]={0, 1, 2, 3, 4, 5};`
    C. `int n[5]={1};`
    D. `int n[5]={1, 5, 9};`
    E. `int n[5]={0};`

62. Polymorphism is implemented through:
    A. Non-**const** functions.
    B. Member functions.
    C. Non-**virtual** functions.
    D. **virtual** functions and dynamic binding.
    E. **inline** functions.

63. A copy constructor must receive its argument by reference instead of by value because:
   A. Otherwise the constructor will only make a copy of a pointer to an object.
   B. The copy of the argument passed by value has function scope.
   C. The pointer needs to know the address of the original data, not a temporary copy of it.
   D. Otherwise infinite recursion occurs.
   E. Otherwise the constructor will never be called.

64. What will be the output of the following program?
```c
#include <stdio.h>
void swap(int a, int b);
int main(void) {
    int i = 1, j = 2;
    swap(i, j);
    printf("i = %d, j = %d\n", i, j);
    return 0;
}
void swap(int a, int b) {
    int temp = a;
    a = b;
    b = temp;
}
```
   A. i=1, j=2
   B. i=2, j=1
   C. i=1, j=1
   D. i=2, j=2
   E. i=0, j=0

65. Which of the following conditions correctly describes the output of this code in Python?
```python
first = [1, 2, 3, 4, 5]
second = first
second.append(6)
print(first)
print(second)
```
   A. first=[1,2,3,4,5],second=[1,2,3,4,5,6]
   B. first=[1,2,3,4,5,6],second = [1,2,3,4,5]
   C. first=[1,2,3,4,5],second = [1,2,3,4,5]
   D. first=[1,2,3,4,5,6],second = [1,2,3,4,5,6]
   E. None of these

66. The definition
```c
char string1[] = "bird";
```
is equivalent to:

   A. char string1[] = {'b', 'i', 'r', 'd', '\0'};
   B. char string1 = {'b', 'i', 'r', 'd', '\0'};
   C. char string1[] = {'b', 'i', 'r', 'd'};
   D. character string1[] = {'b', 'i', 'r', 'd', '\0'};
   E. char string1[4] = {'b', 'i', 'r', 'd', '\0'};

67. Consider the following C code fragment:

```c
int i=10;
do {
    printf("%d ", i*=2.5);
} while(i<100)
```

What output will be generated?

A. 25 62
B. 25 62 155
C. 25 62.5
D. 25 62.5 156.25
E. None of the above

68. Call-by-reference can achieve the security of call-by-value when:
A. A large argument is passed in order to improve performance.
B. A pointer to the argument is used.
C. The **const** qualifier is used.
D. The value being passed is small.
E. The argument is an array.

69. **Student** is a base class and **TA** is a derived class, with a redefined non-**virtual coding** function. Given the following statements, will the output of the two **coding** function calls be identical?

```cpp
TA t;
Student *sPtr = &t;

sPtr->coding();
sPtr->Student::coding();
```

A. It depends on the implementation of the **coding** function.
B. It depends on the value of object **t**.
C. Yes.
D. Yes, if **coding** is a static function.
E. No.

70. The array subscript operator **[]**, when overloaded, cannot:
A. Be used with linked list classes.
B. Take multiple values inside (e.g., [4,8]).
C. Take a double as an operand.
D. Take user-defined objects as operands.
E. None of the above.

71. Which of the following arithmetic is not allowed on pointers?
A. Adding an integer to a pointer.
B. Subtracting an integer from a pointer.
C. Subtracting one pointer from another.
D. Comparing pointers by using **<**.

E. None of the above.

72. What is the output of this code in Python?
```
L1 = []
L1.append([1, [2, 3], 4])
L1.extend([7, 8, 9])
print(L1[0][1][1] + L1[2])
```
A. 3
B. 8
C. 11
D. 38
E. None of these

Question group 73 to 75 ：Consider the following code of a singly linked list, with the function F to "rotate" the list by moving the first item of the list to the end of the list. The input to the function is the address of pfirst, the pointer to the first item in the list. You need to select the correct expressions to put into the code in the following three questions so that the function works correctly.
```
struct node {int data; struct node *next};
void F(struct node **pfirst){
    struct node *x, *y, *first = *pfirst;
    if(first && first->next){
        x = first;
        y = *pfirst = AAA ;
        while(y->next) y = y->next;
        BBB = x;
        CCC = NULL;
    }
}
```

73. What expression should be in "AAA"?
A. x
B. x->next
C. y->next
D. first
E. x->next->next

74. What expression should be in "BBB"?
A. y
B. x->next
C. y->next
D. first
E. *pfirst

75. What expression should be in "CCC"?
A. x
B. x->next
C. y->next
D. first
E. *pfirst

76. What will be the declaration of the following requirements?
    (i.) An array of 10 pointers to integer named a.
    (ii.) A pointer of 10 integers named p.
    A. `a[10]; *p[10];`
    B. `**a[10]; *p[10];`
    C. `*a[10]; (*p)[10];`
    D. `*a[10]; **p[10];`
    E. `(*a)[10]; *p[10];`

77. Which of the following gives the number of elements in the array int `a[]`?
    A. `sizeof(a)`
    B. `sizeof(*a)`
    C. `size(a[])`
    D. `sizeof(*a)/sizeof(int)`
    E. `sizeof(a)/sizeof(int)`

78. Consider the following function and code segment.

```
void me( int x, int & y )
{
    x = 10;
    y = x + 1;
}
int main()
{
    // other code ...
    int j = 5;
    int k = 3;
    me(j, k);
    // other code ..
}
```

After the call to `me(j, k);` what are the values of `j` and `k`?
    A. `j = 5, k = 6;`
    B. `j = 10, k = 11;`
    C. `j = 5, k = 11;`
    D. `j = 10, k = 6;`
    E. `j = 10, k = 18;`

79. Assume this code fragment is embedded in an otherwise correct and complete program. What should be the output from this code segment?

```
{
    for(int i=0;i<5;i++)
    {
        . . .
        . . .
    }
    cout << i << endl;
}
```

A. 5
B. 4
C. 6
D. 0
E. The variable **i** is undefined in this scope

80. Consider the following C code fragment:

```
int x=38;
int *p=&x;
```

Which of the following code will output 38?
A. `printf("%d", &*p);`
B. `printf("%d", *&p);`
C. `printf("%d", *&x);`
D. `printf("%d", &*x);`
E. None of the above

81. Which of the following C statements is incorrect?
A. `typedef enum {Spade, Heart, Diamond, Club };`
B. `typedef enum {Spade, Heart, Diamond, Club } Suit;`
C. `enum {Spade, Heart, Diamond, Club } suit;`
D. `enum suit {Spade, Heart, Diamond, Club };`
E. None of the above

82. Suppose the output of the following C code fragment is 0xffff00003a04:

```
int x=38;
int *p=&x;
printf("%p", p);
```

What is the output of 「`printf("%p", p+3);`」?
A. 0xffff00003a04
B. 0xffff00003a07
C. 0xffff00003a10
D. 0xffff00003a16
E. None of the above

83. If the line:
`friend class A;`
appears in class **B**, and the line:
`friend class B;`
appears in class **C**, then:
A. Class A is a friend of class C.
B. Class A can access private variables of class B.
C. Class C can access private variables of class B.
D. Class C can call class A's private member functions.
E. Class B can access class A's private variables.

84. Since the postfix increment operator returns objects by value and the prefix increment operator returns objects by reference:
    A. Prefix increment has slightly more overhead than postfix increment.
    B. The postfix increment operator returns the actual incremented object with its new value.
    C. Objects returned by postfix increment cannot be used in larger expressions.
    D. Postfix increment cannot be used in larger expressions.
    E. The postfix increment operator typically returns a temporary object that contains the original value of the object before the increment occurs.

85. `virtual` destructors must be used when:
    A. The constructor in the base class is `virtual`.
    B. `delete` is used on a base-class pointer that points to a derived-class object.
    C. `delete` is used on a derived-class object.
    D. Every member function of the base class is `virtual`.
    E. Every data member of the base class is `virtual`.

86. What should be filled in the following blanks if we want to print `{0:[90, 'Alice'],1:[87, 'Bob'],2:[93, 'Apple']}` in this Python code?
    ```python
    x = [90,87,93]
    y = ('Alice','Bob','Apple')
    z = {}
    for i in range(len(x)):
        _____

    print(z)
    ```
    A. `z[i]=[x[i],y[i]]`
    B. `z[i]=x[i],y[i]`
    C. `z[i]=list(zip(x,y))`
    D. `z[i]=x,y`
    E. None of these

87. What is the output of the following Python code? `print([(a,b) for a in range(3) for b in range(a)])`
    A. `[(1,0),(2,0),(2,1)]`
    B. `[(0,0),(1,1),(2,2)]`
    C. `[(1,0),(2,1),(2,1)]`
    D. `[(1,0),(2,1),(3,2)]`
    E. `[(1,0),(2,1),(2,2)]`

88. Consider the recursive function,
    ```c
    int fun1(int n)
    {
      if (1==n)
        return 1;
      else
        return fun1(n-1) + 2*n - 1;
    }
    ```
    Which of these expressions could replace a call to this function?

A. n^2
B. $n^2 + n + 1$
C. $n!$
D. $(n + 1)^2$
E. $(n - 1)^2$

89. Consider the following C code fragment:

```c
char *str1="Hello";
char str2[]={'W', 'o', 'r', 'l', 'd', 0};
int i;
for(i=0;i<5;i++)
    str2[5-i-1]=str1[i/2];
printf("%s", str2);
```

What output will be generated?

A. leeHH
B. olleH
C. oolHH
D. Hello
E. None of the above

90. Consider the following C++ code fragment:

```cpp
int &max(int &a, int &b)
{
    if(a>b) return a;
    return b;
}

int main()
{
    int x=35, y=42;
    max(x,y)=10;
    max(x,y)++;
    cout << x << ", " << y;
}
```

What output will be generated?
A. 36, 10
B. 36, 43
C. 36, 11
D. 11, 11
E. None of the above

111學年度學士後醫學系各科標準答案

學士後醫學系-普通生物及生化概論

試題	第1題	第2題	第3題	第4題	第5題	第6題	第7題	第8題	第9題	第10題	第11題	第12題	第13題	第14題	第15題	第16題	第17題	第18題	第19題	第20題
答案	A	A	E	E	A	E	D	C	A	B	C	D	E	E	D	D	B	A	C	C
試題	第21題	第22題	第23題	第24題	第25題	第26題	第27題	第28題	第29題	第30題	第31題	第32題	第33題	第34題	第35題	第36題	第37題	第38題	第39題	第40題
答案	E	C	A	B	B	C	D	A	D	C	B	A	C	A	A	C	D	E	B	A
試題	第41題	第42題	第43題	第44題	第45題	第46題	第47題	第48題	第49題	第50題	第51題	第52題	第53題	第54題	第55題	第56題	第57題	第58題	第59題	第60題
答案	D	A	D	D	E	D	B	A	B	B	C.E	C	A	D	B	E	C	B	B	E
試題	第61題	第62題	第63題	第64題	第65題	第66題	第67題	第68題	第69題	第70題	第71題	第72題	第73題	第74題	第75題	第76題	第77題	第78題	第79題	第80題
答案	A	D	A	B	E	D	C	A	D	D	D	A	C	C	C	E	E	D	B	C
試題	第81題	第82題	第83題	第84題	第85題	第86題	第87題	第88題	第89題	第90題										
答案	A	E	A	B	C	D	D	C	C	A										

學士後醫學系-物理與化學

試題	第1題	第2題	第3題	第4題	第5題	第6題	第7題	第8題	第9題	第10題	第11題	第12題	第13題	第14題	第15題	第16題	第17題	第18題	第19題	第20題
答案	C	B	E	A	E	B	A	E	E	D	A	C	B	A	D	A	D	B	C	B
試題	第21題	第22題	第23題	第24題	第25題	第26題	第27題	第28題	第29題	第30題	第31題	第32題	第33題	第34題	第35題	第36題	第37題	第38題	第39題	第40題
答案	E	D	D	D	E	E	C	D	C	E	A	C	A	C	D	E	A	A	D	B
試題	第41題	第42題	第43題	第44題	第45題	第46題	第47題	第48題	第49題	第50題	第51題	第52題	第53題	第54題	第55題	第56題	第57題	第58題	第59題	第60題
答案	D	E	B	A	C	A	B	A	C	D	E	D	A	C	C	B	D	A	C	D
試題	第61題	第62題	第63題	第64題	第65題	第66題	第67題	第68題	第69題	第70題	第71題	第72題	第73題	第74題	第75題	第76題	第77題	第78題	第79題	第80題
答案	C	D	A	D	A	B	B	D	A	B	E	C	E	C	A	D	A	C	B	E
試題	第81題	第82題	第83題	第84題	第85題	第86題	第87題	第88題	第89題	第90題										
答案	B	B	A	B	D	B	C	E	A	E										

學士後醫學系-計算機概論與程式設計

試題	第1題	第2題	第3題	第4題	第5題	第6題	第7題	第8題	第9題	第10題	第11題	第12題	第13題	第14題	第15題	第16題	第17題	第18題	第19題	第20題
答案	C	D	D	B	C	A	A	B	C	E	C	A	A	C	D	B	B	B	E	E
試題	第21題	第22題	第23題	第24題	第25題	第26題	第27題	第28題	第29題	第30題	第31題	第32題	第33題	第34題	第35題	第36題	第37題	第38題	第39題	第40題
答案	D	C	A	E	B	E	A	E	A	E	A	B	D	B	D	A	B	B	B	E
試題	第41題	第42題	第43題	第44題	第45題	第46題	第47題	第48題	第49題	第50題	第51題	第52題	第53題	第54題	第55題	第56題	第57題	第58題	第59題	第60題
答案	B	A	A	C	B	D	A	C	E	C	C	D	D	B	E	D	E	C	D	E

試題	第61題	第62題	第63題	第64題	第65題	第66題	第67題	第68題	第69題	第70題	第71題	第72題	第73題	第74題	第75題	第76題	第77題	第78題	第79題	第80題
答案	A	D	D	A	D	A	B	C	C	B	E	C	B	C	B	C	E	C	E	C
試題	第81題	第82題	第83題	第84題	第85題	第86題	第87題	第88題	第89題	第90題										
答案	A	C	B	E	B	A	A	A	A	A										

學士後醫學系- 英文

試題	第1題	第2題	第3題	第4題	第5題	第6題	第7題	第8題	第9題	第10題	第11題	第12題	第13題	第14題	第15題	第16題	第17題	第18題	第19題	第20題
答案	B	B	C	D	D	D	E	B	E	D	B	C	D	B	D	E	A	E	B	B
試題	第21題	第22題	第23題	第24題	第25題	第26題	第27題	第28題	第29題	第30題	第31題	第32題	第33題	第34題	第35題	第36題	第37題	第38題	第39題	第40題
答案	A	A	E	D	D	C	D	E	D	A	B	D	C	B	A	B	D	D	D	E
試題	第41題	第42題	第43題	第44題	第45題	第46題	第47題	第48題	第49題	第50題										
答案	A	B	D	A	A	E	D	C	C	B										