A. Match: For each term, write the corresponding letter for the description that best matches it from below. (15%)

1. __e__ Stream extraction operator
2. __n__ Sentinel
3. __b__ Integer division
4. __k__ ?:
5. __c__ Syntax error
6. __m__ ++
7. __h__ Condition expressions
8. __f__ return
9. __d__ Modulus operator
10. __a__ int x;
11. __i__ static_cast< double >
12. __j__ +=
13. __g__ Stream insertion operator
14. __l__ double
15. __o__ Nested control statement

a) Holds whole number values.
b) An operation that truncates fractional part of its result.
c) Prevents a program from compiling.
d) An operation that yields the remainder after integer division.
e) >>.
f) One of several means to exit a function.
g) <<.
h) Commonly formed by using equality operators and relational operators.
i) Can be used to create a temporary floating-point copy of its operand.
j) Addition assignment operator.
k) Conditional operator.
l) A data type for storing floating-point values.
m) Increment operator.
n) Special value which indicates the end of data entry.
o) Appears in the body of another control statement.

B. Close: Complete each sentence. (15%)

a) __0 and 1__ are the default display values for bool values.
b) __Sticky setting__ are the output stream format settings that stay in effect until they're changed.
c) A convenient control statement for performing counter-controlled repetition. __for__
d) The __break__ statement causes the immediate exit from a repetition statement.
e) The __&&__ is the logical AND operator.
f) The __||__ is the logical OR operator.
g) The __default case__ is the optional part of a switch statement.
h) Using functions as building blocks to create programs is termed as __Software reuse__
i) Technique for reducing the range of values produced by function rand is called __Scalling__
j) A library __header file__ contains function prototypes and definitions of various data types.
k) The function __srand__ plant a seed for the random-number generator.
l) Invoking a function is termed as __Function call__
m) A __local variable__ is known only in the function in which it is defined.
n) Technique for constructing a program from smaller, more manageable pieces is termed as __Divide and conquer__
o) The portion of a program in which an identifier may be referenced is called its __Scope__.

C. Write a C++ statement or a set of C++ statements to accomplish each of the followings: (30%)

a. Write four different C++ statements that each subtracts 1 to integer variable **x**.

b. Generates a random number between 10 and 100, together with **seed** and **time** function.

c. Suppose int z=6; in four **cout** stream output statements, print out z as 7 7 7 7 in four lines. The final value of z should be 6 (Hint: using increment and decrement operators).

d. Declare a enumeration type MONTH with 12 constants Jan, Feb,..,Dec and the integer values of the MONTH should start from 1.

e. Determine whether the character read into a variable **terminate** from **cin** stream is EOF or not. If it is, print "At file end" else print "continue reading file.". Using both *if statement* and *conditional operator*.

D. Write a function with an integer parameter that indicates the number of times for throwing two dices, sum up all the total points thrown, and return the points via the function. Please use a for statement and the random number generator to implement the function. Make it a truly random function too. (15%)

E. Redo question D, using both **while** and **do while** statements. (15%)

F. Write a function that takes an integer value argument and output "it is even" or "it is odd" depends on the value. Note the function returns nothing and you have to print out the double quotation marks ("). (10%)

Final Exercise 5.34
Due day: 2020/01/19 midnight.

小明：
阿公，請問您以後是
英文好還是國語好？

阿公：
小孩子不要談政治！