

FUKIEN SECONDARY SCHOOL
S1 Final Examination (2020-2021)
Computer Literacy
(30 minutes)

Date: 22nd June 2021

Time: 8:30 a.m. – 9:00 a.m.

Name: _____

Class: _____ No.: _____

Question Paper

Instructions to students:

1. Write your name, class and class number on both the question paper and the answer sheet.
2. Answer ALL questions.
3. Hand in the question paper and the answer sheet at the end of the examination.
4. The total mark of the paper is 100.

I. Practical Examination (40 marks)**II. Multiple-choice Questions (20 marks; 2 marks each)**

Choose the best option for each of the following questions.

1. Which of the following file formats is **not** a vector graphic?
 - A. svg
 - B. jpg
 - C. ai
 - D. gvdesign
2. Which of the following codes has the same function as `cout<<"\n";` ?
 - A. `cout<<endl;`
 - B. `cout<<"endl";`
 - C. `cout<<end;`
 - D. `cout<<"end";`
3. Which of the following is correct to give some descriptions of the code “`int lnum;`”?
 - A. `int lnum;` /the largest number
 - B. `int lnum;` //the largest number
 - C. `int lnum;` \\the largest number
 - D. `int lnum;` \the largest number

4. Which of the following are the characteristics of using a vector graphic?
- (1) The image can be enlarged freely without the appearance of jagged staircase effect (aliasing).
 - (2) The size of the file remains unchanged even if the image is enlarged.
 - (3) It is suitable for real scenery image.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
5. Which of the following applications are developed using C++ program?
- (1) Operating system
 - (2) Computer games
 - (3) Complicated calculation
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
6. A vector graphic can have several layers. Which of the following are the advantages of using layers to create a vector graphic?
- (1) Complicated graphics can be easily handled.
 - (2) It is convenient to modify different objects in the graphics.
 - (3) In the same graphic document, different information can be shown as needed.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
7. What is the output of the following C++ codes?
- ```
int i, j;
i=1;
for (i; i<=5; i=i+1) {
 cout<<"*";
}
```
- A. \*\*\*\*\*  
B. \*\*\*\*\*  
C. \*  
\*  
\*  
\*  
D. \*  
\*  
\*  
\*  
\*

8. What is the output of the following C++ codes?

```
int i, j;
i=1;
j=1;
for (i; i<=5; i=i+1) {
 for (j; j<4; j++) {
 cout<<"*";
 }
}
```

A. \*\*\*

B. \*\*\*\*

C. \*\*\*  
\*\*\*  
\*\*\*  
\*\*\*  
\*\*\*

D. \*\*\*\*  
\*\*\*\*  
\*\*\*\*  
\*\*\*\*  
\*\*\*\*

9. What is the output of the following C++ codes?

```
int i, j;
i=1;
j=1;
for (i; i<=3; i=i+1) {
 for (j; j<=i; j++) {
 cout<<"*";
 }
}
```

A. \*\*\*

B. \*\*\*\*

C. \*  
\*\*  
\*\*\*

D. \*\*\*  
\*\*  
\*

10. What is the output of the following C++ code?

```
int mark;
mark=50;
if (mark<=30)
 cout<<"D";
else if (mark<=40)
 cout<<"C";
else if (mark<=50)
 cout<<"B";
else
 cout<<"A";
```

A. A

B. B

C. C

D. D

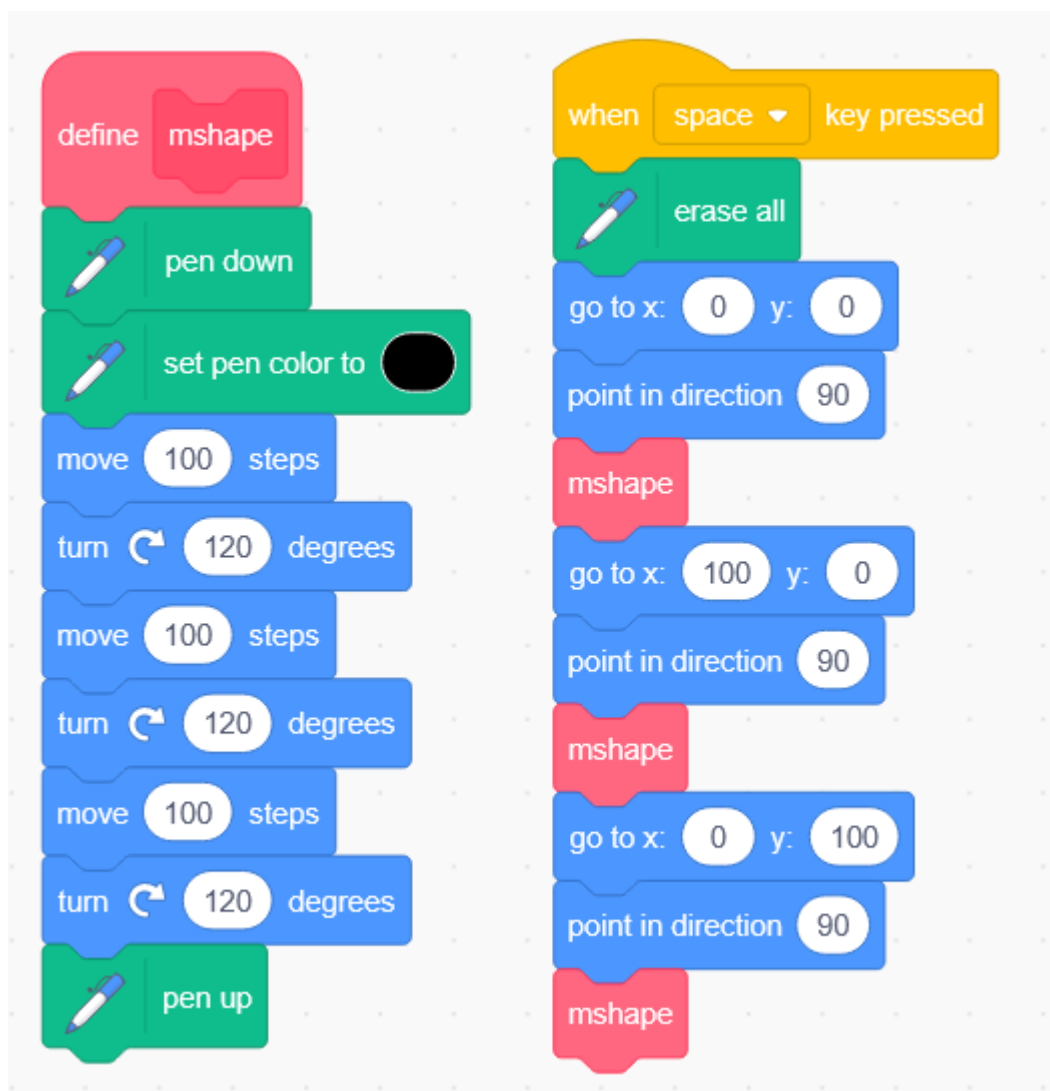
### III. Matching (10 marks)

Match the functions with the icons commonly used in vector graphic application. Write the corresponding letters on your answer sheet. The first one is done for you as example.

| Column I | functions       | Column II | icon                                                                                  |
|----------|-----------------|-----------|---------------------------------------------------------------------------------------|
| (1)      | Text Tool       | A         |    |
| (2)      | Flip Horizontal | B         |    |
| (3)      | Align Center    | C         |    |
| (4)      | Align Middle    | D         |     |
| (5)      | Bring Forward   | E         |     |
| (6)      | Ungroup objects | F         |  |
|          |                 | G         |  |
|          |                 | H         |  |
|          |                 | I         |  |

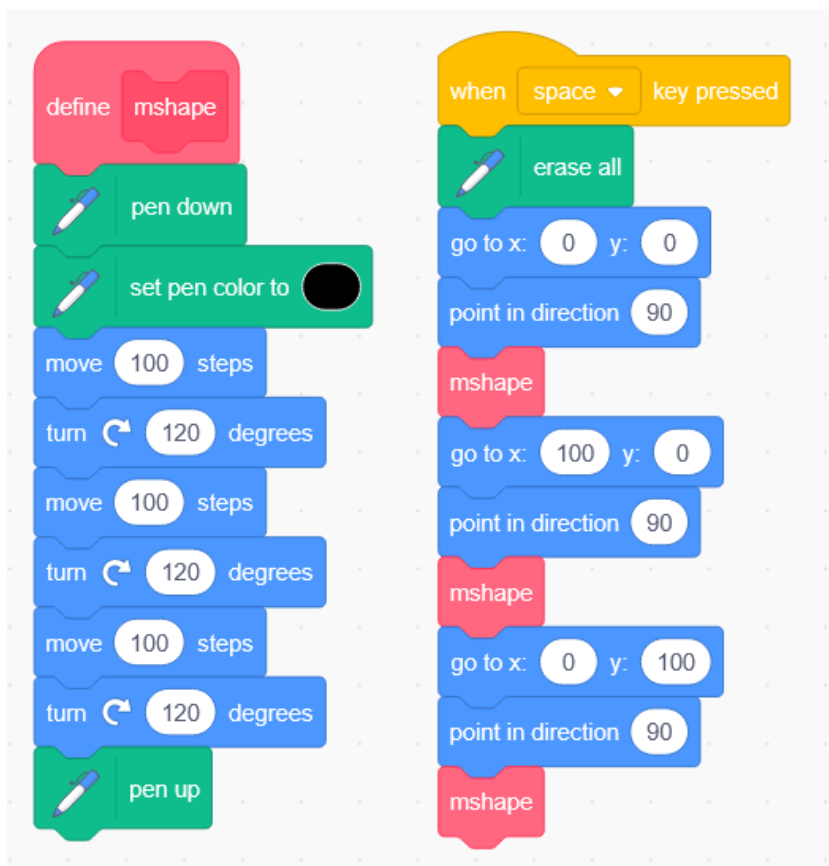
## IV. Structured Questions (30 marks)

1. With reference to the following Scratch program:

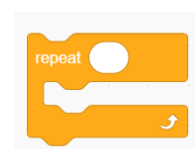
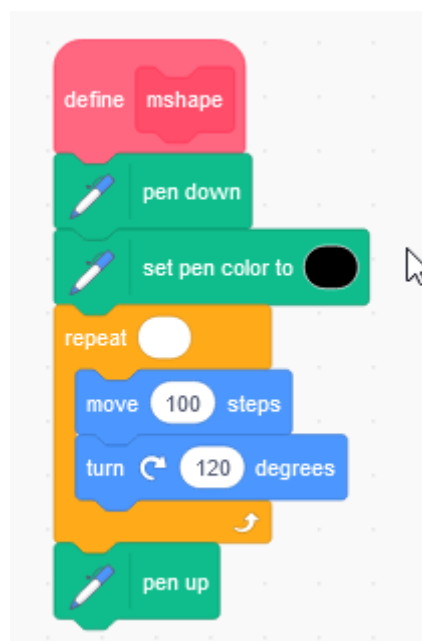


- (a) How does this program start? (2 marks)
- (b) What is the function of the function block named “mshape”? (2 marks)
- (c) What is the advantage of using function block? (2 marks)
- (d) According to the above block scripts, draw the output in the box provided. (3 marks)

Actually, to simplify the following scripts,

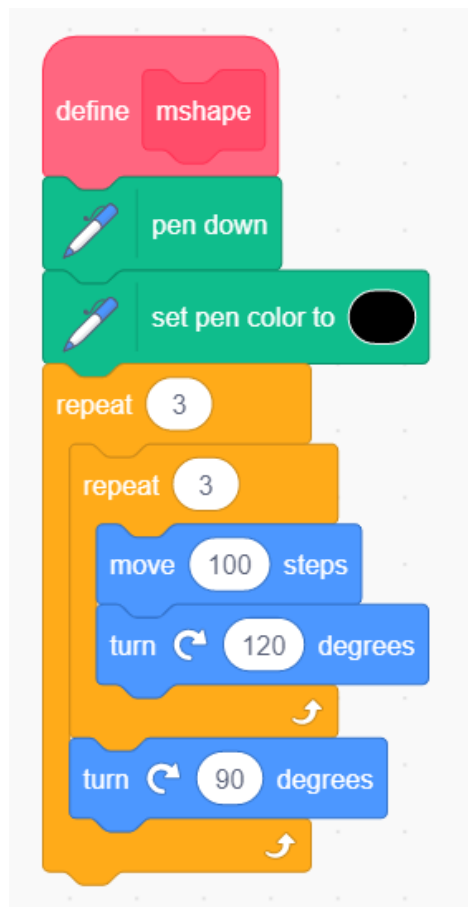


we can use loop block as below:



(e) What number should we fill in the blank in the above repeat block ? (2 marks)

(f) If we want to create more changes of the output shape, we can rewrite the scripts as below:



Draw the output of the above scripts in the box provided.

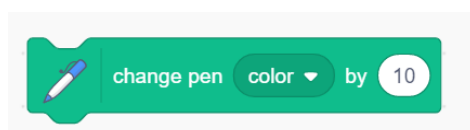
(3 marks)

(g) If we insert the following block script just before change does the output shape have?



, what

(2 marks)



2. With reference to the following C++ codes:

| Line | Program Code                       |
|------|------------------------------------|
| 6    | int a,b,c;                         |
| 7    | a=1;                               |
| 8    | b=1;                               |
| 9    | c=1;                               |
| 10   | int bmark;                         |
| 11   | cout<<"enter the first number: ";  |
| 12   | cin>>a;                            |
| 13   | cout<<"enter the second number: "; |
| 14   | cin>>b;                            |
| 15   | cout<<"enter the third number: ";  |
| 16   | cin>>c;                            |
| 17   | bmark=a;                           |
| 18   | if (b>bmark)                       |
| 19   | bmark=b;                           |
| 20   | if (c>bmark)                       |
| 21   | bmark=c;                           |
| 22   | cout<<"the number is "<<bmark;     |

- (a) List all the variables in the above codes. (4 marks)
- (b) Which lines of codes can be deleted without affecting the output? State the reason. (5 marks)
- (c) If 3, 9 and 7 are input into the program in order,
- (i) what is the value of bmark in line 17? (1 mark)
  - (ii) what is the value of bmark in line 19? (1 mark)
  - (iii) what is the value of bmark in line 22? (1 mark)
- (d) According to the output, what is the purpose of this program? (2 marks)

**END OF PAPER**