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FUKIEN SECONDARY SCHOOL

S1 First Term Examination (2020-2021)

Computer Literacy (30 minutes)

Date: 4 th January 2021	Name:			
Time: 8:30a.m 9:00a.m.	Class:	No.:		

Question Paper

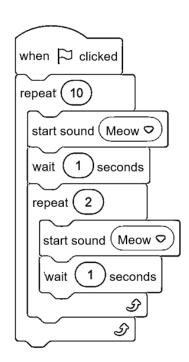
Instructions to students:

- 1. Write your name, class and class number on both the question paper and the answer sheet.
- 2. Write your answers on the answer sheet.
- 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.

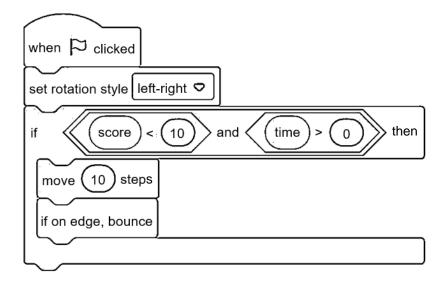
I. Practical Examination (40 marks)

II. Multiple Choice Questions (20 marks; 2 marks each) Choose the best option for each of the following questions.

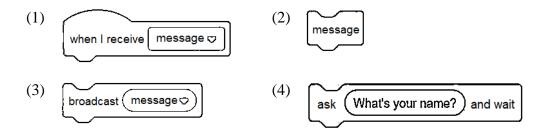
- 1. Which of the following applications can be developed by using Scratch?
 - (1) Quiz game
 - (2) Storyboard
 - (3) Drawing shapes
 - (4) Shooting game
 - A. (1) and (4) only
 - B. (2) and (3) only
 - C. (1), (2) and (3) only
 - D. (1), (2), (3) and (4)
- 2. Which of the following statements about <u>functions</u> is **incorrect**?
 - A. You can contain other functions when defining a function.
 - B. When defining a function, it must contain the function itself.
 - C. Before running a function, we have to define it.
 - D. A function is run after being called.
- 3. To show the sentence "I love x." in Scratch (where x denotes variable values, (x), input by the user), how many (in) should be used at least?
 - A. 2
 - B. 3
 - C. 4
 - D. 5
- 4. How many times does the block "play sound Meow" run?
 - A. 2 times
 - B. 10 times
 - C. 30 times
 - D. infinite times



Answer Questions 5 and 6 with reference to the following Scratch script.

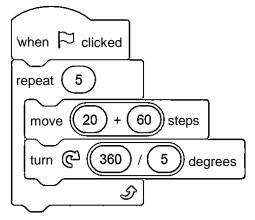


- 5. Which of the following conditions **does not** need to meet for the sprite to move?
 - A. score < 10
 - B. green flag is clicked
 - C. click the sprite
 - D. time > 0
- 6. If we want to edit the program so that either one of the conditions in the if statement is fulfilled, the sprite will move. How should the program be modified?
 - A. Use "or" block to replace "and" block
 - B. Use "when this sprite is clicked" block to replace "when green flag is clicked" block
 - C. Change move 10 steps to move 20 steps
 - D. Nothing should be changed
- 7. Which of the following blocks should be working in pair?



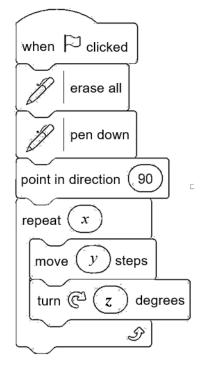
- A. (1) and (2)
- B. (1) and (3)
- C. (2) and (3)
- D. (3) and (4)

Answer Questions 8 and 9 with reference to the following Scratch script.



- 8. How many steps will the sprite move after running the script?
 - A. 20 steps
 - B. 60 steps
 - C. 80 steps
 - D. 400 steps
- 9. How many degrees will the sprite turn after running the script?
 - A. 36 degrees
 - B. 72 degrees
 - C. 144 degrees
 - D. 360 degrees
- 10. For a sprite to draw a circle, which group of values should type for x, y and z in the script is correct?

	<u>X</u>	$\underline{\mathcal{Y}}$	<u>z.</u>
A.	360	1	1
B.	4	50	90
C.	3	80	120
D.	6	100	60



III. Structured Questions (40 marks)

1. Write down the value for each of the following arithmetic expressions.

Arithmetic Expression	Value
6 / 2 + 2	(a)
6 + 4 - 2 * 2	(b)

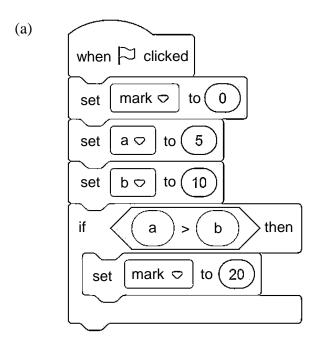
(4 marks)

2. Identify if the results of the following logical expressions are "true" or "false".

Logical Expression	Result
(70 > 50)	(a)
not (50 = 50)	(b)
(30) > (50) or (50) = (50)	(c)

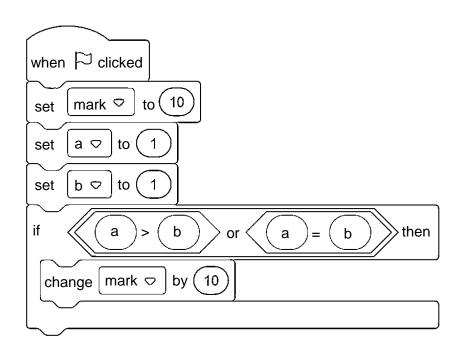
(6 marks)

3. After executing the following Scratch program segments, what will the value of the variable "mark" be?



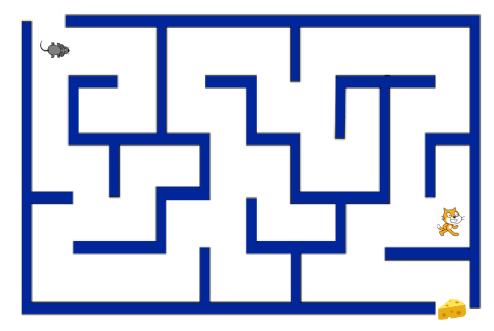
(2 marks)

(b)



(2 marks)

4. The following screenshot shows the Scratch program created by Peter.



The player can control the mouse by using arrow keys on keyboard and the mouse cannot pass through walls. The mouse wins the game when it touches the cheese.

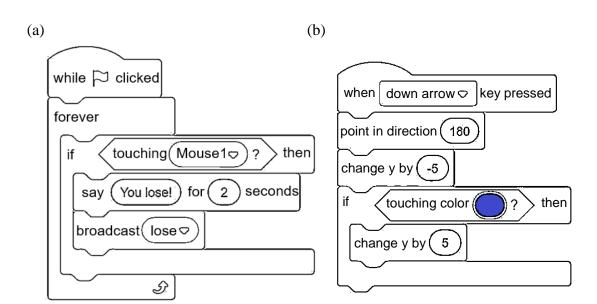
If the mouse touches the cat, the mouse will be sent back to its starting position.

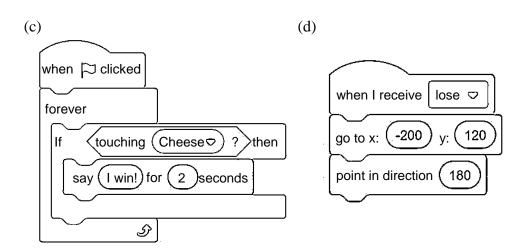
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Identify where the following scripts (a), (b), (c) and (d) should be placed, in the sprite *Cat*, *Cheese* or *Mouse1*.

Describe what will happen when we execute each of the scripts.

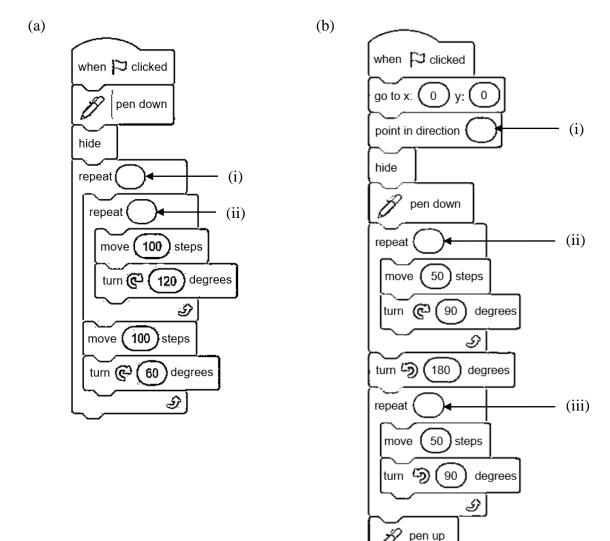




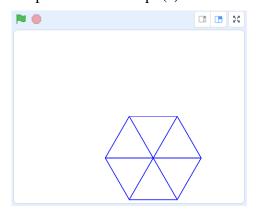


(16 marks)

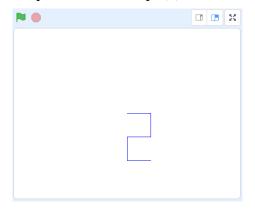
5. Complete the following Scratch program in order to output the diagrams below.



Output screen of script (a):



Output screen of script (b):



(10 marks)

END OF PAPER