

- Q8.** There are two important operations on a stack: PUSH and POP. PUSH adds the new data to the top of the stack leaving previous data below, and POP removes and returns the current top data of the stack. When the operations shown below are sequentially executed, which of the following is the correct combination of the values  $x$  and  $y$ ? Here, the size of the stack is big enough to hold the entire data. “PUSH( $a$ )” inserts the data  $a$  into the stack, and “POP( $b$ )” removes the data  $b$  from the stack.

[Operations]

PUSH (5);

PUSH (3);

PUSH (6);

PUSH (1);

$x = \text{POP}()$ ;

PUSH (7);

$y = \text{POP}()$ ;

	$x$	$y$
a)	1	6
b)	1	7
c)	5	3
d)	5	7