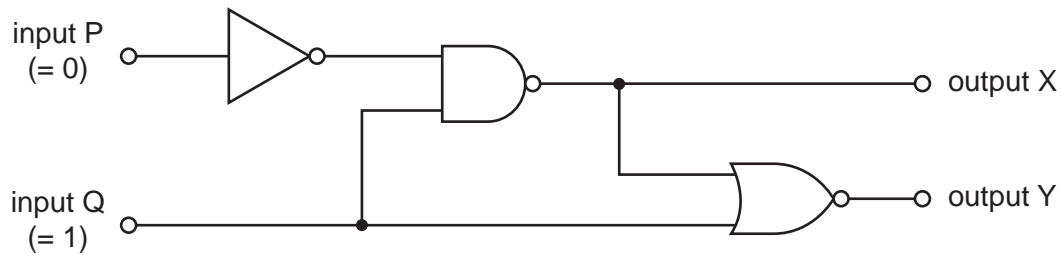


1 The diagram shows a combination of logic gates.

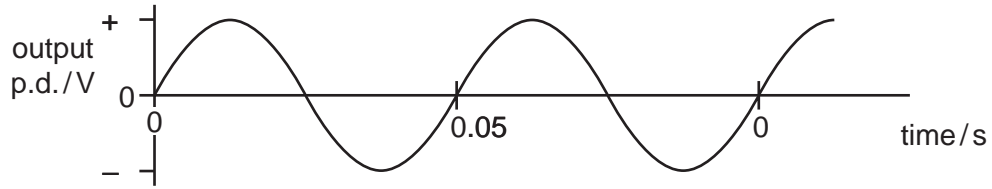


Input P is at a logic state 0 (low) and input Q is at a logic state 1 (high).

What are the logic states at output X and at output Y?

| | output X | output Y |
|----------|----------|----------|
| A | 0 | 0 |
| B | 0 | 1 |
| C | 1 | 0 |
| D | 1 | 1 |

- 2 The graph shows the output of an a.c. generator. The coil in the generator rotates 20 times in one second.



The speed of rotation of the coil steadily increases.

Which graph best shows how the output changes?

