

- 7 (a) State Faraday's law of electromagnetic induction.

.....

.....

..... [2]

- (b) Fig. 7.1 shows two identical long vertical copper tubes A and B.

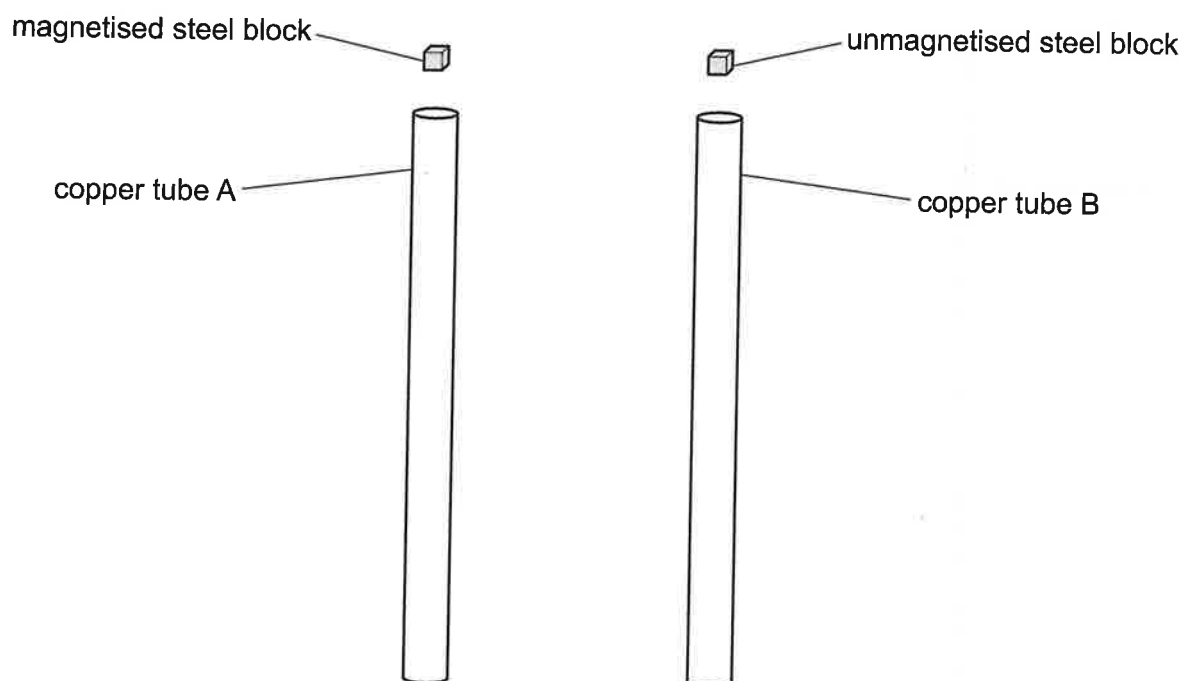


Fig. 7.1

A small steel block is dropped into the top of each tube. The two blocks are identical except that only the block that falls through tube A is magnetised.

Explain why the magnetised block that falls through tube A takes a much longer time to reach the bottom of the tube than the unmagnetised block that falls through tube B.

.....

.....

.....

.....

.....

..... [3]