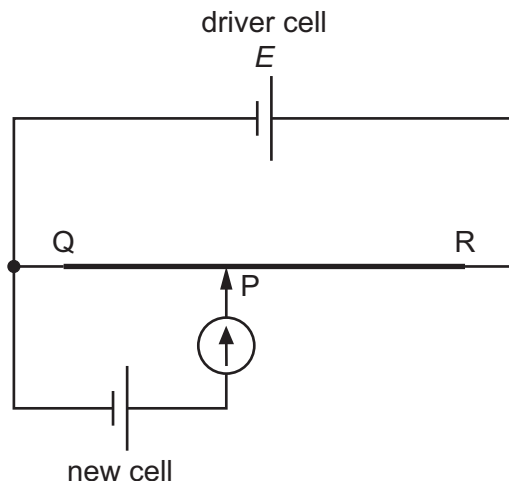


- 37** A potentiometer and a driver cell of electromotive force (e.m.f.) E are used to measure the e.m.f. of a new cell.

A sliding contact at P is moved along a resistance wire QR until the reading on the galvanometer is zero.



What is an essential requirement for the e.m.f. of the new cell to be measured accurately?

- A** The e.m.f. of the driver cell must be less than the e.m.f. of the new cell.
- B** The galvanometer must have a large resistance.
- C** The internal resistance of the new cell must be zero.
- D** The resistance per unit length of the wire QR must be constant.