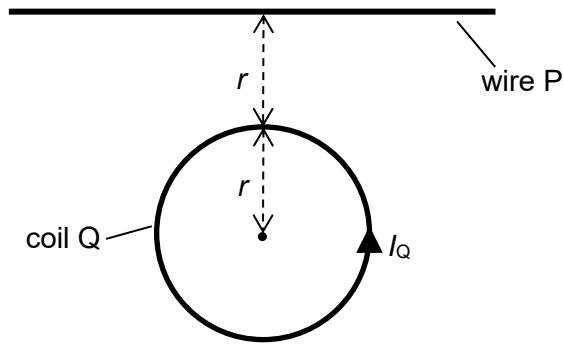


- 25** A coil Q of a single turn and radius r , carries an anti-clockwise current I_Q and lies flat on the table. A long straight wire P carrying current I_P is placed on the same table such that its perpendicular distance from the centre of coil Q is $2r$.



Which of the following will cause the resultant magnetic field at the centre of coil Q to be zero?

- A** I_P to the right, $I_P = 2\pi I_Q$
- B** I_P to the left, $I_P = 2\pi I_Q$
- C** I_P to the right, $I_Q = 2\pi I_P$
- D** I_P to the left, $I_Q = 2\pi I_P$