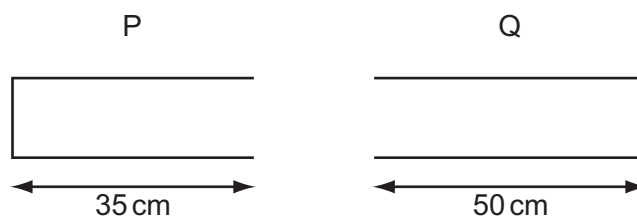
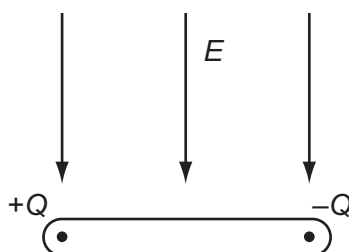


- 30 Travelling waves of wavelength 20 cm are created in the air columns in a closed pipe P and an open pipe Q. The lengths of the pipes are shown.



In which pipe or pipes are stationary waves formed?

- A** P and Q
B P only
C Q only
D neither P nor Q
- 31 The diagram shows an insulating rod with equal and opposite point charges at each end. An electric field of strength E acts on the rod in a downwards direction.



Which row is correct?

| | resultant force | resultant torque |
|----------|-----------------|------------------|
| A | zero | clockwise |
| B | downwards | clockwise |
| C | zero | anti-clockwise |
| D | downwards | anti-clockwise |

Space for working