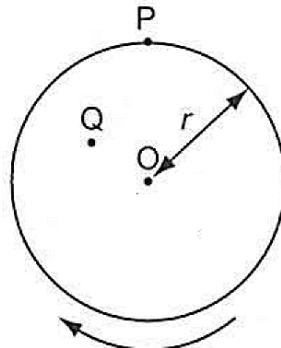


- 26** A copper disc of radius  $r$  rotates about its centre O at a constant speed. It is placed in a uniform magnetic field perpendicular to its surface. P is a point on the rim of the disc, while Q is a point at distance  $\frac{r}{2}$  from O.



A steady electromotive force (e.m.f.)  $E$  is generated between points O and P.

What is the e.m.f. generated between points P and Q?

**A** zero

**B**  $\frac{1}{4} E$

**C**  $\frac{1}{2} E$

**D**  $\frac{3}{4} E$