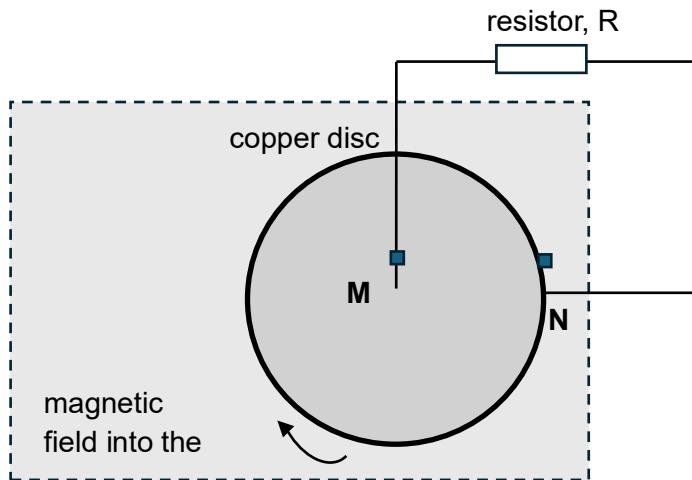


- 24** A copper disc rotates with a constant angular velocity in a uniform magnetic field applied perpendicular to its surface, as shown. The axle and the edge of the disc are in contact with metallic brushes M and N which are connected to a resistor R via wires.



Which of the following statements is correct?
direction of rotation

- A** There is no current through R because there is no flux change through the disc.
- B** There is an alternating current through R.
- C** There is a steady current from M, through R, to N.
- D** There is a steady current from N, through R, to M.