26 A circular loop of wire is placed in a uniform magnetic field of 1.2 T that is normal to the plane of the loop. The loop shrinks from a radius of 0.2 m to a radius of 0.1 m in 0.1 s, at a rate which generates a steady e.m.f..

Which one of the following gives the induced e.m.f.?

A $1.2 \times \pi(0.2 - 0.1)^2 \times 10$ V

B $1.2 \times \pi(0.2)^2 \times 10$ V

C $1.2 \times 2\pi(0.2 - 0.1) \times 10$ V

D $1.2 \times \pi(0.04 - 0.01) \times 10$ V