

Moving Charges and Magnetism

7. A galvanometer is used in laboratory for detecting the null point in electrical experiments. If, on passing a current of 6 mA it produces a deflection of 2° , its figure of merit is close to : [Sep. 05, 2020 (II)]

- (a) 333° A/div. (b) $6 \times 10^{-3} \text{ A/div.}$
- (c) 666° A/div. (d) $3 \times 10^{-3} \text{ A/div.}$

• (d) Given,

Current passing through galvanometer, $I = 6 \text{ mA}$

Deflection, $\theta = 2^\circ$

Figure of merit of galvanometer

$$= \frac{I}{\theta} = \frac{6 \times 10^{-3}}{2} = 3 \times 10^{-3} \text{ A/div}$$