

1.) Cyclotron is used to accelerate.
ans. some kind of charged particles (a).

2.) The force that accelerates the particles in the cyclotron is
ans. Lorentz force (c).

3.) choose the correct option.
ans. a conductor shields any charge within it (b).

4.) Inside a dipole.
ans. The particles velocity changes (b).

5.) what is the formula for maximum speed attained by a
charged particle in a cyclotron
ans. $V_{max} = \frac{qBR}{m}$ (a).

6.) Galvanometer was named after.
ans. Italian electricity researcher Luigi Galvani (a).

7.) Galvanometer is used.
ans. To detect and measure small electric current.

8.) choose the correct option for current sensitivity of
galvanometer.
ans. $S_i = \frac{\theta}{I} = NBA$ (a).

9.) Increasing the current sensitivity
ans. may not change the voltage sensitivity (b).

10.) choose the correct option for design formula of
galvanometer (a) $\left(\frac{C}{BNA} \right) \theta$

vi.) (d)

3.) (d)

ii.) (a)

iii.) (a)

iv.) (d)

v.) (b)

vi.) (d)

4.) (d)

2.) (c) Intensity

3.) a.) More

4.) a.) i.) $\left(\frac{C}{BNA}\right) \theta'$

5.) c.) $S_i^\circ = \theta_i^\circ = \frac{C}{NBA}$