

HOME ASSIGNMENT :

1. Cyclotron is used to accelerate

(b) Any kind of charged particle

(a) Same kind of charged particles

ii

The force that accelerates the particles in the cyclotron is

(b) Only magnetic field force

iii (a) conductor shields any charge within it from electric fields created outside the conductor.

iv

Inside a dee.

(d) The particles kinetic energy changes

v a) $v_{max} = \frac{qBR}{m}$

vi d) none of these

2. i Galvano meter was ~~named~~ named after

b) Italian electricity researcher Luigi Galvani who discovered galvanometer

ii Galvano meter is used to

a) to detect and measure small electric charge.

iii) a) $S_i = \frac{\theta}{i} = \frac{NBA}{C}$

iv) b) may not change the voltage sensitivity

v) a) $i = \left(\frac{C}{BNA} \right) \theta$

vi) a) Directly proportional to $\sin \theta$

3i) a) both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.

ii) a) both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.

iii) a) both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.

iv) d) Both Assertion and Reason are false

v) b) both Assertion and Reason are true but ^{the} Reason is not the correct explanation of the Assertion

vi) a) both Assertion and Reason are true and the Reason is the correct explanation of Assertion

4 (1) d - an ammeter is connected in series in a circuit and the current through it is negligible

(2) c - Infinity

(3) (a) more

$$(4) i = \left(\frac{C}{NBA} \right) \theta$$

$$(5) a) S_i = \frac{\theta}{i} = \frac{NBA}{C}$$