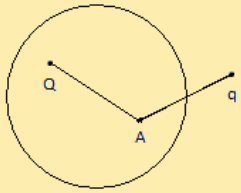
PHYSICS

Q1. A metallic sphere is shown in the figure. Find out the electric field at point A, given the distance from Q is x and from q is y?

- kQ/x^2
- kq/y^2
- zero
- k[(Q/x^2)+(q/y^2)]

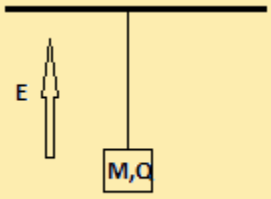


Q2. Suppose the energy supplied to the electrons of Cesium atom is 1.9ev. What will be the kinetic energy of the photoelectrons coming out of the metal? Given, work function of the metal is 1.9ev.

- Zero
- 1.9 ev
- 3.8 ev
- between zero and 1.9 ev

Q3. A block of mass M and charge Q is hung by a string in a vertical electrostatic field E. the tension developed in the string will be _____.

- Mg-QE
- Mg +QE
- QE
- Zero

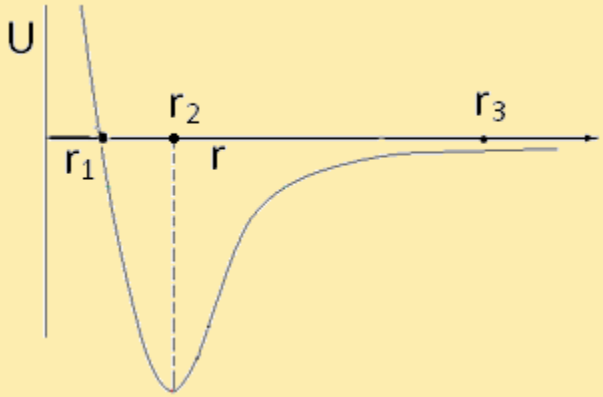


Q4. Anubhav throws an iron ball from a top of a building of height h with a speed v. When will the ball hit the ground with maximum speed?

- When it is thrown vertically upwards
- The speed wil not depend on the initial direction
- When it is thrown horizontally

- When it is thrown vertically downwards

Q5. In the potential energy graph between two atoms, what is the equilibrium state?



- $r = r_1$
- $r = r_2$
- $r = r_3$
- $r = (r_1+r_3)/2$