

Date - 9/11/22 Application of Coriolis force

B.Sc-I

- * It is taken into account to compute accurately trajectories of long range projectile & missile
- * It is C.F that produces counter clock wise circulation in northern hemisphere which affects course of winds.
- * Spinning motion of earth is that causes equatorial bulge.

CENTRIPETAL FORCE

Centripetal force is defined as the force required to make an object move on a curved path without changing its speed. It can be provided by several means like tension in case of a stone being rotated by a string, gravitational force in case of earth's rotation around sun, electrostatic force in case of electron's rotation about the nucleus. For such a rotating body rotating with the speed v , the centripetal force given by

$$F = \frac{mv^2}{r}$$

where m is the mass of the object and r is the instantaneous radius of curvature.