**Q2.** Given vector in Cartesian coordinate system at point P(-2,6,3). Convert the vector into cylindrical and spherical coordinates.

**Given:-**, x=-2, y=6, z=3

**Formula:-** Cylindrical- Cartesian ;;

Spherical-Cartesian;

;

**Solution:-**

Cylindrical coordinates:

Z=3

Spherical coordinates:

**Ans:­- is cylindrical coordinates**

**is spherical coordinates.**