Q 01 Which of the following are true?

- (a) A polar satellite goes around the earth's pole in north-south direction
- (b) A geostationary satellite goes around the earth in east-west direction
- (c) A geostationary satellite goes around the earth in west-east direction
- (d) A polar satellite goes around the earth in east-west direction

Ans. (a, c)

The satellite which appears stationary relative to the earth is called a geostationary or geosynchronous satellite, a communication satellite.

A geostationary satellite revolves around the earth with the same angular velocity and in the same sense as done by the earth about its own axis, i.e. west-east direction.

A polar satellite revolves around the earth's pole in north-south direction. It is independent of earth's rotation.