

- 13** A communication satellite is in a geostationary orbit at a height of 3.59×10^7 m above the equator. The radius of the Earth is 6.40×10^6 m.

How fast is the satellite travelling?

- A** 0.490 km s^{-1} **B** 2.60 km s^{-1} **C** 3.08 km s^{-1} **D** 186 km s^{-1}

- 14** The diagram shows a satellite in a circular orbit of radius r around a planet of mass M . The satellite has mass m and is moving with speed v . The gravitational field strength at the surface of the planet is g .