

6. A satellite of mass 620 kg is placed into an Earth orbit of radius 23 000 km.

The mass of the Earth is  $6.0 \times 10^{24}$  kg.

The gravitational force that the satellite experiences from the Earth in this orbit is

A  $4.7 \times 10^2$  N

B  $4.7 \times 10^8$  N

C  $1.1 \times 10^{10}$  N

D  $1.1 \times 10^{13}$  N

E  $6.9 \times 10^{13}$  N.