

Q. Is it possible for a body to have inertia but no weight?

Ans. Yes, a body can have inertia (*i.e.*, mass) but no weight. Everybody always have inertia (*i.e.*, mass) but its weight (mg) can be zero, when it is taken at the centre of the earth or during free fall under gravity.

e.g., In the tunnel through the centre of the earth, the object moves only due to inertia at the centre while its weight becomes zero.

