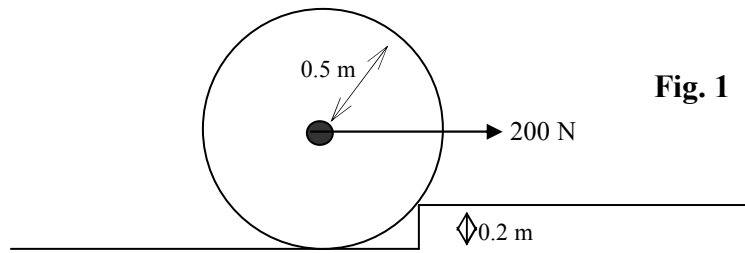**(b)** A wheel of radius 0.5 m is about to be pushed over a kerb of height 0.2 m by a horizontal force of 200 N applied at the axle, as shown in **Fig.1** below.

Fig. 1

Calculate
  (i) the weight of the wheel

weight = …………….……………N [3]

  (ii) the minimum force required to push this wheel over the kerb

minimum force = ……………………………N [3]