TURNING EFFECT OF A FORCE

1. B
2. C
3. B
4. c [M1]
clockwise moment (accept moment on RH side) was too big [A1]
reduce moment by reducing distance [A1]
note: moment must be mentioned in both of the last 2 marks; accept turning effect, torque and leverage as alternatives to moment

5.
(a) 0.96 accept ‘0.06 × 16’ 1
Ncm accept ‘cmN’ 1
accept for both marks ‘0.0096 Nm’
do not accept lower case n for N
the mark for the unit may be given in
(b) (i) provided it is not contradicted in part (a)

(b) (i) any one from 1
☐ 0. 96 Ncm
☐ the same as the carbon dioxide balloon
accept the same numerical answer given in (a) (the unit is not required)
accept ‘the same’

(ii) 0.02 consequential marking applies 1
accept numerical answer to (b) (i)÷48

[4]

6.
(a) down 1
(b) Ellie and Maggy names may be in either order 1
both names are required for the mark
do not accept ‘540 and 540’
this rules out the same person being used twice
(c) **A** up **B** down

award the mark if only one of these correct responses is given provided an incorrect response is not written in the other box

(d) any one from
- Rosie
- Jack
- Rosie or Jack

do **not** accept ‘490’
do **not** accept ‘510’
do **not** accept ‘490 or 510’
do **not** accept ‘Rosie and Jack’