

PHYSICS FORM 4

MONTHLY TEST 2/ 2016

Answer: SECTION A: (20marks)

1	C	11	C
2	C	12	D
3	D	13	D
4	C	14	A
5	A	15	B
6	C	16	B
7	A	17	C
8	C	18	A
9	D	19	C
10	A	20	A

SECTION B: (10marks)

(a)  $R=W=460\text{ N}$  (1m)

(b)  $R - mg = ma$

$$R = ma + mg$$

~~$$R = 46(2) + 46(10)$$~~

$$R = 552\text{ N} \quad (2\text{m})$$

(c)  $mg - R = ma$

$$R = mg - ma$$

$$R = 46(10) - 46(2)$$

$$R = 368\text{ N} \quad (2\text{m})$$

(d) (i)  $R - mg = ma$

$$R = ma + mg$$

~~$$R = 46(0) + 46(10)$$~~

$$R = 460\text{ N} \quad (2\text{m})$$

(ii) At constant velocity,  $a=0$  (1m)

(e) 1. At rest (1m)

2. Moves up or down at a constant velocity (1m)