Revision Sheet

IGCSE Physics · Unit 1 Motion, forces and energy

30 vocabulary items · 20 marks of exam questions (9 questions)

Part 1 · Vocabulary review answer key. Section A wants the exact English spelling.

Question	Answer	Marks
1	mass	1
2	energy	1
3	principle of conservation of energy	1
4	momentum	1
5	force	1
6	resultant force	1
7	resultant	1
8	weight	1
9	scalar quantity	1
10	vector quantity	1
11	uniform	1
12	stability	1
13	velocity	1
14	terminal velocity	1
15	acceleration	1
16	speed	1
17	speed–time graph	1
18	deceleration	1
19	gravitational field strength	1
20	gravitational potential	1
21	limit of proportionality	1
22	moment	1
23	equilibrium	1
24	centre of gravity	1
25	impulse	1
26	kinetic	1
27	power	1
28	efficiency	1
29	pressure	1
30	density	1

Multiple Choice Answers

Q31: B
Q32: D
Q33: A
Q34: B

Multiple Choice Answers

Q35: D
Q36: A
Q37: A

38(a)	ship is not solid steel / there are air spaces in ship
	(average) density of ship is less than the density of the water
38(b)	the centre of gravity is lower and (so) the ship is more stable
	the centre of gravity is lower **OR** ship more stable
38(c)	1.4×10^7 J **OR** 14 MJ **OR** 14 000 kJ
	$\Delta E_p = mg(\Delta)h$ **OR** ($\Delta E_p =$) $mg(\Delta)h$ **OR** $30\,000 \times 9.8 \times 48$

39(a)(i)	extension (of the spring) is (directly) proportional to the force / load (applied to the spring, up to the limit of proportionality)
39(a)(ii)	W=mg in any form OR force is (directly) proportional to mass
39(a)(iii)	80 N
39(b)	straight line through / from origin with positive gradient up to 175 N
	smooth curve after 175 N with increasing positive gradient
39(c)	(80 N × 3.5 m =) 280 J
	ΔE = Fxd in any form OR GPE= mgh in any form