Practice Question Set For GCSE

hydraulic (system)

(a)

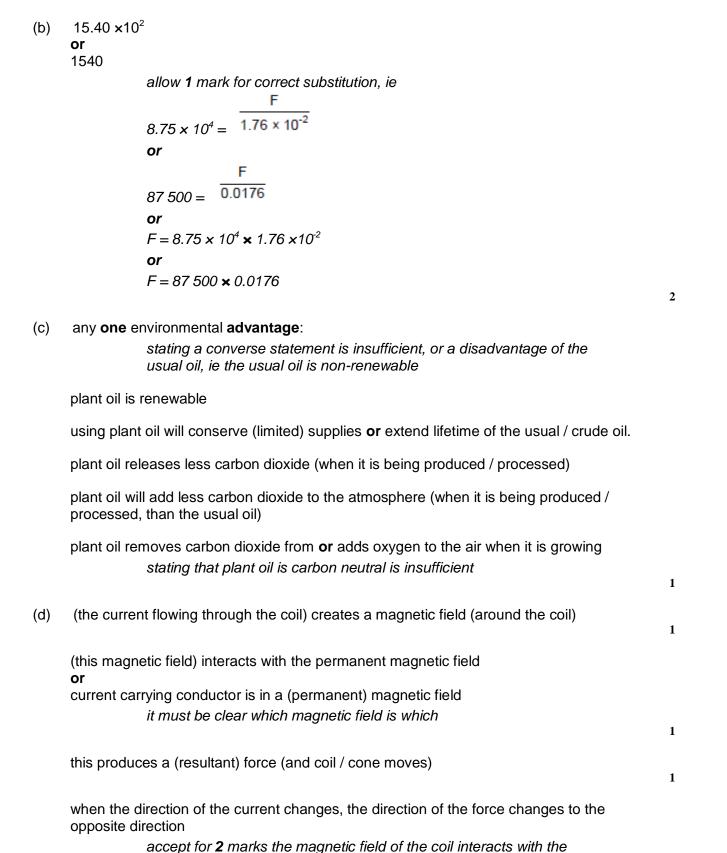
Subject: Physics

Paper-2 Topic: GCSE Triple Science_Forces (High Demand Questions)



Name of Max. Ma	Time : 25 Minutes					
Mark Sch	Mark Schemes					
Q1.						
(a)	300	00				
			correct substitution of 24 / 0.008 gains 1 mark provided no subsequences are shown	uent		
				2		
	N /	m² or	Pa	1		
4. \	(1)			1		
(b)	(i)	K	accept ringed K in			
			table	1		
				1		
	(ii)	wat	er exiting bottle one-third of vertical height of K allow less than half vertical height of spout shown, judged by eye			
			anow roos than han volusial holgheor speak shown, jaaged by sys	1		
		wat	er landing twice the distance of the spout shown in the diagram			
			accept at least one and a half times further out than spout shown, judged by eye			
			do not accept water hitting the side of the sink			
			ignore trajectory	1		
(c)	wat	er will	I land on the (vertical) side of the sink			
(0)	wat	CI WIII	accept sink not long / wide / big enough			
	or					
	wat	er will	dribble down very close to the bottle			
	or					
	that	part	of the bottle is curved do not accept goes out of the sink			
			do not accept good out of the clim	1		
				[7]		
Q2.						

1



Q3.

(a) (i) turning accept turning ringed in the box

permanent magnetic field

1

1

[8]

	(ii)	point at which mass (or weight) may be thought to be concentrated accept the point from which the weight appears to act allow focused for concentrated do not accept most / some of the mass do not accept region / area for point	1
(b)	600	(Nm)	
		400 x 1.5 gains 1 mark provided no subsequent steps shown	2
(c)	(i)	plank rotates clockwise	
		accept girl moves downwards	
		do not accept rotates to the right	1
		(total) CM > (total) ACM	
		accept moment is larger on the girl's side	1
		weight of see-saw provides CM	
		answer must be in terms of moment	
		maximum of 2 marks if there is no reference to the weight of the see-saw	
			1
	(ii)	W = 445 (N)	
		$W \times 1.5 = (270 \times 0.25) + (300 \times 2.0)$ gains 2 marks	
		allow for 1 mark:	
		total CM = total ACM either stated or implied	
		Or (270 × 0.25) + (200 × 2.0)	
		(270 × 0.25) + (300 × 2.0) if no other marks given	
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			[10]