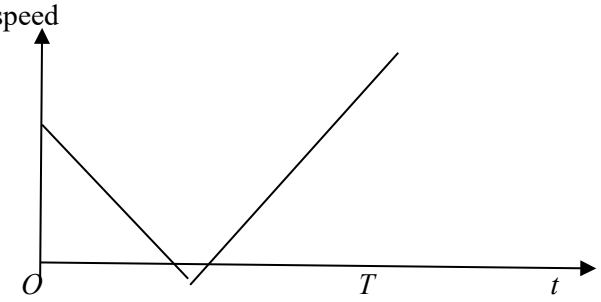
Question Number	Scheme	Marks
4(a)	$0^2 = u^2 - 2\times g\times 19.6$	M1 A1
	$-24.5 = uT - \frac{1}{2}gT^2$	M1 A1
	Produce an equation in *T only* and solve for *T*	DM1
	$T = 5$	A1
		(6)
4(b)	speed  	B1 Shape DB1 Second line longer than the first, approx. equal angles and *T* or their answer for *T* marked
		(2)
		(8)
	Notes for question 4	
4(a)	M1 Attempt at a relevant *suvat* equation which uses $s = 19.6$ (or -19.6), with correct no. of terms but condone sign errors.	
	A1 A correct equation (*g* does not need to be substituted)	
	M1 Attempt at another relevant *suvat* equation which uses 24.5 or 44.1 e.g. finding time from *B* to the ground, with correct no. of terms but condone sign errors,	
	A1 A correct equation (neither *u* nor *g* need to be substituted)	
	DM1 dependent on both M marks , for finding an equation in *T* only and solving for *T* i.e. for a complete method to find *T* **N.B**. This mark cannot be awarded if their equation has NO solutions.	
	A1 $T = 5$ **N.B.** If $g = 9.8$ has not been used, A0	
4(b)	B1 A V-shape (*and nothing else*) starting on the speed axis, with point on the *t*-axis	
	DB1 Dependent on the first B1, for approximately equal angles between the 2 lines and the *t*-axis, second line longer than the first, *T* or their *T* marked correctly. B0 if clearly unequal angles. **N.B**. If graph reflected, B0 DB0.	