Question number	Answer	Notes	Marks
6 (a)	B – energy;		1
(b) (i)	(resultant force =) 6750 (N);		1
(ii)	(resultant) force = mass x acceleration;	allow in standard symbols and rearrangements e.g. F = m x a	1
(iii)	substitution OR rearrangement; evaluation; unit; e.g. acceleration = 6750/2500 (acceleration =) 2.7 m/s^2	allow ecf from (b)(i) unit mark is independent allow $m\,s^{-2}$	3
(c)	any 5 of: MP1. there is a resultant force (to the right); MP2. (so) it accelerates (0 to 50 s); MP3. air resistance (and friction) increase as speed increases; MP4. so acceleration decreases; MP5. eventually air resistance (+ friction) = driving force; MP6. (hence) resultant force is zero (after 50 s); MP7. (hence) car travels at a constant speed (after 50 s);	allow idea that driving force is greater than air resistance and friction the speed/velocity increases forces are equal / balanced no acceleration / terminal velocity	5

Total for question = 11 marks