Question number	Answer	Notes	Marks
8 (a) (i)	idea that the dome loses electrons;	however expressed reject if idea that positive charge has been transferred	1
(ii)	substitution into $E = V \times I \times t$; rearrangement; evaluation; e.g. $0.50 = 120\,000 \times I \times 15$ $I = 0.50 / [120\,000 \times 15]$ $(I =) 2.8 \times 10^{-7}$ (A)	ignore units -1 for POT error allow 0.000 000 277…(A) condone 2.7×10^{-7} (A)	3
(b) (i)	any three from: MP1. metal case loses electrons; MP2. (because) metal case is a conductor; MP3. dome and metal case have the same charge; MP4. repulsion between dome and metal case;	 allow metal case becomes (positively) charged	3
(ii)	any four from: MP1. repulsive force from dome decreases as separation increases; MP2. named downward force e.g. weight, air resistance acts on the case; MP3. (eventually, resultant) downwards force acts on case; MP4. causing the case to slow down; MP5. kinetic energy decreases; MP6. gravitational potential energy increases; MP7. kinetic energy becomes zero (at maximum height);	 allow speed becomes zero	4

Total for Question 8 = 11 marks