

Question number	Answer	Notes	Marks
6 (a)	creation of a (large) nucleus from small nuclei; resulting in a loss of mass; and the release of energy;	condone "fusing of two nuclei"  accept reference to $E=mc^2$ condone "converted to energy"	3
(b) (i)	electrical working;	condone 'electrically'	1
(ii)	substitution in $V_{in}I_{in} = V_{out}I_{out}$ ; re-arrangement; evaluation; correct answer = 1.8 (kA)  e.g. input power = output power $V_{in}I_{in} = V_{out}I_{out}$ $28 \times 21 = 330 \times I_{out}$ $I_{out} = (28 \times 21) \div 330$ $I_{out} = 1.7818...$	-1 POT error	3

Total for Question 6: 7 marks