Question number	Answer	Notes	Marks
2 (a)	any two from: MP1. water is renewable/eq; MP2. no fuel / transportation cost; MP3. no air pollution / greenhouse gases; MP4. always available (vs wind/solar);	 allow "water is free"/eq allow named pollutant e.g. CO_2 etc. allow "reliable" allow "respond quickly to demand"	2
(b) (i)	gravitational (potential energy);		1
(ii)	C (electrically); A is incorrect because there is no temperature difference B is incorrect because there are no light or sound waves emitted D is incorrect because the transfer does not involve forces		1
(c) (i)	rate of {energy transfer / doing work};	allow alternatives to rate e.g. per second, per unit time etc.	1
(ii)	evaluation of number of seconds in a day; substitution into P = W ÷ t; evaluation; e.g. 1 day = (24 × 60 × 60 =) 86 400 seconds (P =) $9.7 \times 10^{14} \div 86\,400$ (P =) 1.1×10^{10} (W)	seen anywhere in working -1 for POT error allow $1.1226\ldots \times 10^{10}$ (W) allow 6.7×10^{11} J/min or 4.04×10^{13} J/hr if given unit changed. 2 marks max. if time unit conversion attempted but incorrect unit e.g. 6.7×10^{11} (J/min) or 4.04×10^{13} (J/hr)	3 1
(iii)	D (22 500 000 000 J/s); A is incorrect because joules is not the unit for power and mega has not been dealt with correctly B is incorrect because mega has not been dealt with correctly C is incorrect because joules is not the unit for power		
(iv)	any one from: • idea that electricity demand varies; • idea that water level in reservoir varies; • idea that water may not be available as readily at certain times of the year;	ignore idea of efficiency	1

Total for Question 2 = 10 marks