

Name of the Student: _____

Max. Marks : 19 Marks

Time : 19 Minutes

Mark Schemes

Q1.

(a)

*accept 'the humpback bridge' symbol**accept circle with cross but no lines**if more than one symbol drawn, no mark unless lamp is labelled*

1

(b) (i) 24

$$\frac{2800}{120}$$

*allow 1 mark for correct substitution ie**allow 1 mark for an answer 1440**ignore any unit*

2

(ii) watt

1

(c) larger than

*accept correct indication inside the box**accept an answer meaning larger than ie greater than*

1

[5]**Q2.**

(a) (i) 0.2 or 1/5

*accept 20% for both marks**allow 1 mark for correct substitution answer of 0.2%**or 20 gains 1 mark**ignore units*

2

(ii) wasted

*accept transformed to heat / other forms**accept transferred to the air / surroundings sound = neutral*

1

(b) (i) any **one** from:

- can fly at night

accept can fly when it is cloudy
accept as a back-up

- can stay in the air for longer
 - can fly in the winter
 - can fly faster
- increases power is neutral*

1

(ii) any **one** from:

- produces no (pollutant) gases

or no greenhouse gases

accept named gas

accept no air pollution

*do **not** accept no pollution*

accept less global warming

accept harmful for pollutant

accept produces no carbon

*do **not** accept environmentally friendly*

- produces no / less noise
 - less demand for fuels
- accept any other sensible environmental advantage*

1

(iii) accept any sensible suggestion eg, map the Earth's surface / weather forecasting / spying / monitoring changes to the Earth's atmosphere, etc

*do **not** accept ideas in terms of transporting*

accept use as a satellite

1

[6]

Q3.

(a) electrical

1

sound

correct order only

1

(b) the energy transformed by the TV will be destroyed

1

(c) a higher efficiency than

1

[4]

Q4.

(a) grid

accept any unambiguous indication

1

(b)	(i)	A (only)	1
	(ii)	D (only)	1
(c)	more than	<i>accept any unambiguous indication</i>	1

[4]