Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Mark Schemes

Q1.

(a) (i) 720

*allow **1** mark for correct substitution,*
ie 72 × 10 provided no subsequent step shown

2

(ii) 720
or
their (a)(i)

1

(b) (i) gravitational potential

allow gravitational
allow potential

1

(ii) 432

*allow **1** mark for correct substitution, ie* $\frac{21600}{50}$ *provided no subsequent step shown*

2

watt / W

1

[7]

Q2.

(a) kinetic

1

(b) (i) generates a lot more energy / electricity / power

need fewer conventional large-scale hydroelectric power stations is neutral

or

can supply (energy / electricity / power) to more homes

1

(ii) Large areas of land are flooded.

1

(c) (i) National Grid

this answer only

1

(ii) less energy / heat loss (from the cables)

accept wasted for loss

accept answers in terms of fewer transformers needed

*do **not** accept less electricity lost / wasted*

*do **not** accept no energy lost*

1

(d) any **one** from:

- fewer rivers (suitable for generators)
- less mountainous (so rivers fall smaller distances)

accept answers in terms of difficulty linking villages and towns to grid (in Nepal)

accept answers in terms of more isolated communities

accept answers in terms of UK having more resources for large-scale power stations

1

[6]

Q3.

(a) (i) solar and wind

both required for mark either order

1

(ii) 37(%)

*accept their **two** sources in a(i)*

correctly added as an error carried forward (ecf)

1

(b) **A**

1

(c) gas is non-renewable

*do **not** accept they are not all renewable*

statements such as gas produces CO_2 is neutral

1

[4]