Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: Energy (Low Demand)

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Name of the Student:_____
Max. Marks : 20 Marks **Time : 20 Minutes**

Mark Schemes

Q1.

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

- waves
  *do **not** accept water*
- tides
- falling water
  accept hydroelectric
- biofuel / biomass
- solar
  accept sun / sunlight
  *do **not** accept light*
  accept solar cells / panels
- geothermal
  *do **not** accept heat*

1

(ii) decrease

1

(b) (i) increases from 4am (to 8am) remains constant from 8am (to 10am)
accept increases from 30 000
accept stays constant from 40 000
*allow **1** mark for goes up then stays the same*
for full credit must be some indication of time or power

2

(ii) natural gas

1

[5]

Q2.

(a) electrical

1

sound
correct order only

1

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

1

(c) a higher efficiency than

1

[4]

Q3.

(a) iron

1

hairdryer

1

kettle

answers can be in any order

1

(b) sound

1

(c) is more efficient than

1

[5]

Q4.

(a) gas

1

oil

1

(b) (both) use steam to drive a turbine

accept (both) use turbines to drive generators

*do **not** accept both have a turbine /generator / use steam*
must describe a step in the process

accept heat / thermal energy transformed to kinetic / electrical energy

1

(c) 140 (°C)

correct answer only

*allow **1** mark for method clearly shown on graph*

accept a cross or other indication at correct position on the line

accept correct description

accept even if numerical answer is incorrect

2

(d) any **one** from:

*do **not** accept answers purely in terms of disadvantages of other methods except for fossil fuels are running out*

- very large energy source / reserves
- no polluting / harmful gases produced

accept named gas CO_2 SO_2 NO_x
accept reduces harmful carbon emissions

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- reduces carbon emissions
  accept does not contribute to global warming
- no fuel needed
- energy is free
- can generate energy for a long time
  accept energy available for a long time
- renewable (energy source)
- fossil fuels are running out
  accept it saves fossil fuels / non-renewable
  accept reduces the amount of fossil fuels being burnt
  accept a named fossil fuel
  Better for the environment / environmentally friendly insufficient
  it is cheaper is insufficient

1

[6]

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