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

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Name of the Student:_____
Max. Marks : 18 Marks **Time : 18 Minutes**

Mark Schemes

Q1.

(a) (i) France

1

(ii) any **one** from:

- different homes have different appliances(*)
- different homes have different numbers of appliances(*)
  (*) accept all homes are different
- standby power not the same for all appliances
- some people will switch appliances off
  accept named appliances
  accept people waste different amounts of energy
- homes have different numbers of residents
- can't measure every (individual) home
  accept any sensible suggestions
  *do **not** accept answers in terms of accurate / precise etc*

1

(b) (i) increases amount of energy wasted
accept (encourages) people to leave appliances on (standby)
accept increases it

1

(ii) any **two** from:

- less electricity needed / generated
- fewer power stations needed
- less coal is burned
  *do **not** accept coal is non-renewable / running out*
  answers in terms of fuel stocks neutral
- less pollutant <u>gases</u> produced
  accept named gases
  accept harmful for pollutant
  accept greenhouse gases
  accept reduce / slow / stop global warming

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accept reduces acid rain

2

(c) joule

1

(d) (i) 6800

*accept £68 for **3** marks an answer of 68 gains **2** marks*
*allow **2** marks for correct substitution ie 400 × 17*
*allow **1** mark for obtaining 400*
*answers of 7480, 4760, 12920, 4080 gain **2** marks*

3

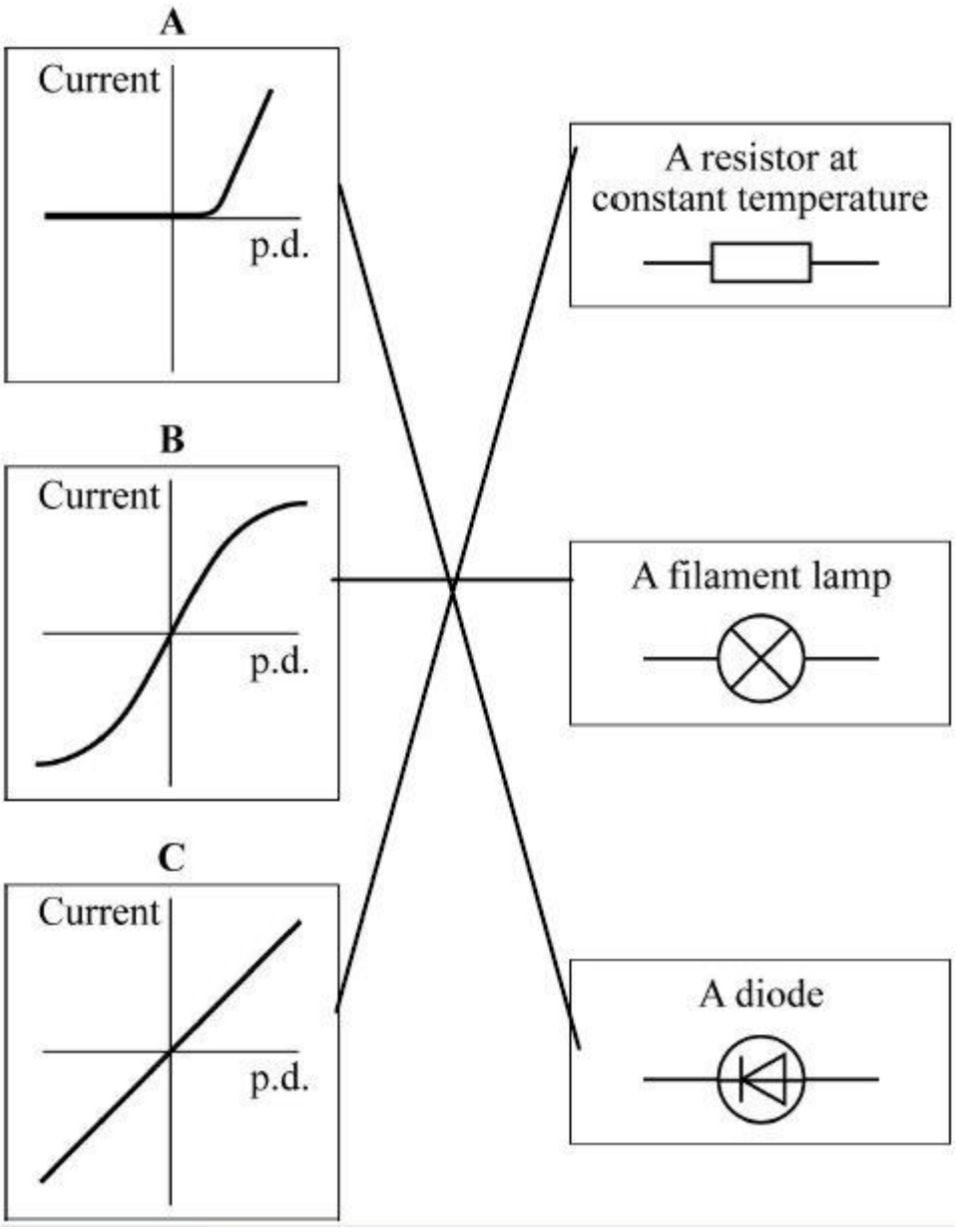
(ii) a small . . . . . electricity

1

[10]

Q2.

(a) **three** lines drawn correctly



*allow **1** mark for 1 correct line*

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if more than one line goes from a graph, both are incorrect

2

(b) **J**

1

[3]

Q3.

(a) (i) 6

1

(ii) 6 (volts)

accept their (a) (i) ignore any units

1

(b) 0.30

accept 0.3

1

(c) smaller(than)

accept correct alternatives to smaller than e.g. less than

1

a bigger current flows through the lamp

only accept if 'smaller than' is given
accept converse
accept a correct calculation
accept resistance is half of 60
accept resistance = 30 (Ω)
*do **not** accept answers in terms of p.d*

1

[5]

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