Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: GCSE Triple Science Atomic Structure (Low Demand Questions)

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

Mark Schemes

Q1.

(a) (i) protostar

correct order only

1

red giant

1

black dwarf

1

(ii) Alpha Centauri A

accept any correct indication, eg alpha, centauri, A
reason only scores if Alpha Centauri A is chosen

1

stars (about) same size as Sun form white / black dwarfs
or
very large stars form red super giants / supernova/black hole

it is the same size as the Sun is insufficient
same life cycle as the Sun is insufficient

1

(b) Atomic nuclei inside the star join together

1

[6]

Q2.

(a) (i) on average, cosmic rays produce less background radiation than rocks.

1

having no X-rays reduces a person's radiation dose.

1

(ii) 4

*allow **1** mark for 350 / 4*
*allow **1** mark for an answer 3.5*

2

(b) (i) (risk) increases

1

(ii) C

*reason only scores if **C** chosen*

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1

shows a lower risk for low doses (than for zero exposure)

accept risk reduces when you go from low to moderate (doses)

1

(c) (i) *no mark for YES or NO, marks are for the explanation*

YES

fewer mice exposed first to a low dose

1

get cancer (than those only exposed to a high dose)

only scores if first marking point scores

NO

the results are for mice (1)

and may not be applicable to people (1)

1

(ii) ethical

1

[10]

Q3.

(a) (i) half / 50 %

1

(ii) Measure the radon gas level in more homes in this area

1

(b) (i) 86

1

(ii) 222

1

[4]

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