Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B1 Cell Biology

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

Mark Schemes

Q1.

(a) (i) increasing one increases the other
gains 1 mark

but
they increase in proportion/ 1/5 taken in at first / 3/10 taken in after 2 weeks
gains 2 marks

2

(ii) *idea that* more/faster diffusion with higher concentration
for 1 mark

or
with more oxygen particles/molecules (in same space)

1

(b) (i) can take more oxygen from (the same) air/changes from 30 to 45/increases by 15
gains 1 mark

but
takes 50% more or 1.5 times as much
gains 2 marks

or
increases by 15 mg breath

2

(ii) more red blood cells develop
or
more haemoglobin in the blood
(not just 'acclimatises')
for 1 mark

1

(iii) 75
60
each for 1 mark

2

[8]

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Q2.

(a) X – relay (neurone)
Y – motor (neurone)

both required for mark

must be in correct order

1

(b) chemical (released from **X**)

*do **not** accept electrical impulse*

accept chemical messenger / transmitter
accept neurotransmitter

accept named transmitter substance eg acetylcholine

1

(crosses) synapse

*allow for **2** marks diffusion of the chemical across the synapse*

1

[3]

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Q3.

(a) **A A a a**

Aa allele correctly separated

1

B b B b

Bb allele arranged to form four different pairings
all four pairings must be correct for the second mark

1

(b) **A** **A**

the two cells the same as the parent cell

a **a**

B **B**

b **b**

1 mark for each cell

2

(c) (i) 46

accept 23 pairs

1

(ii) 23

accept half if c(i)

1

(iii) 46

accept save as c(i)

1

[7]

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