Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B2 Organisation

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Name of the Student:_____
Max. Marks : 29 Marks **Time : 29 Minutes**

Mark Schemes

Q1.

(a) (i) mitosis
for 1 mark
1

(ii) 1
fertilised egg cell has 1 albino gene from father splits to produce identical cells / produced by mitosis
each for 1 mark
3

(b) (i) less protection from UV light / UV radiation
for 1 mark
1

(ii) ideas of uncontrolled multiplication of mutated cells reject fast / rapid cell division cells invade of other parts / cells transported in blood
each for 1 mark
2

[7]

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Q2.

(i) increase in CO_2 concentration leads to increase in volume of air inhaled
increase of % carbon dioxide has little effect over most of range / large increase when % carbon dioxide > 5.6 %

each for 1 mark

2

(ii) *idea that*
depth of breathing changes at low % carbon dioxide, in crease in % CO_2 results in volume of each breath increasing without increase / little increase in number of breaths

each for 1 mark

2

[4]

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Q3.

pancreas produces lipase
which breaks down / digests fats into fatty acids and glycerol
liver produces bile / hydrogen carbonate
which neutralises acids / makes alkaline
provides optimum / best / most effective pH for lipase / enzyme action
bile emulsifies fats / description
increasing the surface area for lipase / enzyme to act on

any five for 1 mark each

(digestion is in stomach / liver / pancreas – penalise only once)

[5]

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Q4.

(a) allow carbon dioxide to enter / gaseous exchange (oxygen neutral) (transpiration neutral)

for one mark

1

(b) guard (cells)

for one mark

1

(c) stops / reduces the rate of water loss / transpiration (*reject* if dark initiated)
stops / reduces wilting / description e.g. drooping / maintains turgor

for 1 mark each

2

[4]

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Q5.

(a) *idea*
O_2 increases
CO_2 decreases
for 1 mark each

2

(b) (i)

reduced	unchanged	increased
digestive system	brain	skin
bone		muscles
		heart and arteries

All (6) correct gains 4
5 correct gains 3
4 correct gains 2
2/3 correct gains 1

Correct wording not needed if unambiguous. No mark if organ repeated.

4

(ii) more/higher/quicker/faster
gains 1 mark
but
7500 more/from 5,000 to 12,500 more
gains 2 marks
but
7500 cm^3/min more
gains 3 marks
or 2½ times more

3

[9]

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