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

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Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Mark Schemes

Q1.

(a) motor

allow efferent / postsynaptic
*allow **another** relay (neurone)*

1

(b) release of chemical (from relay neurone)

allow ecf for 'motor' neurone from (a)
allow release of neurotransmitter / named example

1

chemical crosses gap / junction / synapse

allow diffuses across
allow chemical moves to X

1

chemical attaches to X / motor / next neurone (causing impulse)

1

(c) (curare) decrease / no contraction

accept (muscle) relaxes

1

(strychnine) increase / more contraction

*if no other mark awarded allow 1 mark for (curare) decrease / no response **and** (strychnine) increase / more response*

1

[6]

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Q2.

(a) DNA replicates
or
two copies of each chromosome form

*allow a maximum of **3** marks if the stages are out of order*
allow DNA duplicates / doubles
allow genetic material doubles
ignore genetic information replicates
*do **not** accept DNA reproduces*

1

one set of chromosomes is pulled to each end of the cell

allow one set of chromosomes is moved to each end of the cell
ignore half the chromosomes are moved to each end of the cell

1

nucleus divides

allow two (new) nuclei form

1

cytoplasm **or** cell membrane divides **and** two genetically identical cells form

*allow cytokinesis **and** two genetically identical cells form*
ignore names of phases of mitosis
*if no other mark awarded allow **1** mark for mitosis*

1

(b) uncontrolled cell division / growth

1

invade neighbouring tissues

1

(tumour) cells spread to different parts of the body / tissues in the blood / lymph

allow tumour metastasises

1

(c) (need to breathe faster / deeper) to get more oxygen

allow the converse if clearly stated

1

(because) smaller surface area

1

(so) less oxygen in the blood

allow (so) less oxygenation of haemoglobin

1

(so) less (oxygen for) respiration

allow (so) anaerobic respiration increases
allow (so) lactic acid is produced
allow (so) an oxygen debt is created
*do **not** accept energy produced / made / created*

1

[11]

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