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

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Name of the Student:_____
Max. Marks : 21 Marks **Time : 21 Minutes**

Mark Schemes

Q1.

(a) (i) haemoglobin / oxyhaemoglobin
must be phonetic
1

(ii) carries oxygen **or** forms oxyhaemoglobin
Ignore references to CO_2 / iron
cancel if extras like food / glucose
1

from lungs to tissues
1

(b) no nucleus **or** biconcave disc (described)
ignore references to size
ignore vague references to being 'round' / 'donut' shaped etc.
1

[4]

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Q2.

(a) **A** = nucleus

accept phonetic spelling only

1

B = (cell) membrane

accept plasma membrane

1

(b) any **one** from:

photosynthesis

<u>makes</u> sugar / starch / carbohydrate / organic material

accept '<u>makes</u> food'
*do **not** accept makes chlorophyll*
ignore stores starch / food / light / chlorophyll

traps or absorbs light

1

(c) any **two** from:

Plant cell	Animal cell
• (has) vacuole **or** has cell sap	• no vacuole **or** small/temporary vacuole **or** no cell sap
• (has) wall/cellulose	• no wall/cellulose **or** <u>only</u> membrane
• (stores) starch **or** doesn't store glycogen	• doesn't store/have starch **or** stores glycogen

ignore reference to shape
must be clear indication in all four boxes
ignore reference to chlorophyll

2

[5]

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Q3.

(a) A cytoplasm

1

where (chemical) reactions take place

*do **not** accept where cell functions take place*

1

or

carries/holds the organelles/named organelles / named chemicals (including nutrients)

*do **not** accept keeps the shape of the cell*

or

contains water

or

presses out on the membrane

allow: keeps cell turgid
allows transport through the cell

B membrane

*do **not** accept by themselves:*
protects cell
gives shape

1

controls what enters/leaves the cell

1

or

contains the cell/holds the cell together

*do **not** accept keeps harmful substances out*

or

allows movement into and out of the cell C nucleus

1

contains the genetic material/DNA/genes/chromosomes

*do **not** accept:*
brain of the cell
stores information/instructions
tells cell what to do

or

controls (the activity) of the cell

1

(b) (i) one mark for each correctly labelled part

cell wall
*do **not** accept anything inboard of the inner edge vacuole*
accept anything inboard of transplant

chloroplast: site of photosynthesis/ for photosynthesis

*accept word equation **or** balanced equation*

1

cell wall: supports the cell/keeps the shape/keeps it rigid

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*do **not** accept protects the cells*

2

(ii) vacuole: acts as reservoir for water / chemicals/(cell)/sap

3

or
keeps cell turgid/pushes content to edge
or
maintains concentration gradient
or
allows cell elongation (not growth)

1

[12]

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