

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

Name of the Student: _____

Max. Marks : 24 Marks

Time : 24 Minutes

Mark Schemes

Q1.

- (a) nucleus
cell
tissue
organ

all in correct order

allow 1 mark for each consecutive pair of structures

3

- (b) any **one** from:

- bladder
- brain
- heart
- (small **or** large) intestine
- kidney
- liver
- lung
- pancreas
- skin
- stomach

allow any organ found in an animal
ignore blood

1

- (c) phloem

1

- (d) large surface area

allow long

(so) it can absorb (a lot of) water / minerals / (mineral) ions

allow long

1

allow 1 mark for (many) mitochondria

allow for 2 marks (many) mitochondria for active transport

1

- (e) any **one** from:

- biggest / widest field of view
- easier to focus

1

- (f) to avoid damage to lens / slide

ignore references to focussing

1

(g) (×)5

allow are underground

1

(h) any **one** from:
(root hair cells)

- are not exposed to light
- do not photosynthesise

allow are underground

1

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Q2.

- (a) cell membrane
extra ticks negates marks 1
- (b) engulf pathogens 1
- produce antibodies 1
- produce antitoxins 1
- extra ticks negates marks*
- (c) 2050 – 100 1
- = 1950
allow 1 mark for a correct subtraction of incorrect values 1
- an answer of 1950 scores 2 marks*
- (d) any **one** from:
• (more) people vaccinated
ignore injections / treatments / medicines unqualified
allow vaccine produced
allow (more people given) MMR (vaccine)
*do **not** allow antibiotics*
ignore less people infected
- (more) people immune
- no new measles strain 1
- (e) any **one** from:
• measles is (caused by) a virus
allow measles is not caused by a bacterium
- viruses cannot be killed / destroyed by antibiotics
*allow antibiotics **only** kill / destroy bacteria*
ignore harmed / treated 1
- (f) any **one** from:
• use of a barrier method of contraception
ignore use of diaphragm
- use of a condom
ignore use protection / safe sex
- vaccination / immunisation
- avoid sexual intercourse / contact
*do **not** accept less sexual intercourse / contact* 1
- (g) any **one** from:
• size / shape/ type of paper disc
ignore paper disc unqualified

- concentration of antibiotic
allow strength / dosage of antibiotic
- volume / amount of antibiotic
- (incubation) time
allow 3 days
- (incubation) temperature
ignore size of petri dish

1

- (h) to check that the disc / water did not have an effect
or
to make sure it was the antibiotic that had an effect
allow for comparison with the antibiotics
allow as a (experimental) control
*do **not** accept as a control variable*

1

- (i) (antibiotic) **A**
no marks if wrong antibiotic given

1

any **one** from:

- (antibiotic **A**) had the **largest** clear area around it
- (antibiotic **A**) killed the **most** bacteria

1

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