Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B3 Infection And Response

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

Mark Schemes

Q1.

blood clots to seal cuts;
kills microbes which enter

each for 1 mark
(allow higher level answers)

[2]

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Q2.

(a) antibiotics do not kill viruses

allow antibiotics only kill bacteria

allow flu is not caused by a bacterium

or

antibiotics are not effective against viruses

allow antibiotics cannot reach viruses inside cells

1

(b) Inactive viruses

1

(c) Conclusion:

people 65 years and older had the highest percentage vaccinated.

ignore references to figures unless qualified

1

Reason:

more worried about becoming ill

or

had more time to go to the doctor.

OR

Conclusion:

children aged 3-years had the lowest percentage vaccinated.

Reason:

parents didn't have time to take them to the doctor

or

they had been vaccinated when 2-years old.

1

[4]

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Q3.

(a) toxins

1

(b) (i) bacteria

1

(ii) mutate

1

(iii) new / different antibiotic

allow new / different drug

*do **not** allow vaccine*

1

[4]

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Q4.

(a) (i) any **one** from:

- age
- gender
- body mass
- number in group / 50
  allow number of children
- high body temperature
  allow starting temperature
  allow dose / amount of drug given

1

(ii) any **one** from:

- tablet that does not contain a drug / anything
  allow sugar pill
  *do **not** allow a different drug*
- fake drug

1

(b) (i) 38.2 (°C)

1

(ii) ibuprofen

no mark for drug
no marks if wrong drug selected

any **two** from:

- reduced body temperature fast(er)
  allow acts fast(er)
- maintained temperature in normal range / around 37 °C (longer / for several hours)
- paracetamol did not reduce temperature to normal / 37 °C
  accept ibuprofen did reduce temperature to normal / 37 °C
- ibuprofen given less frequently
  allow less drug needed
  ignore cheaper unless qualified

2

[5]

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Q5.

(a) any **one** from:

- amount / concentration of antibiotic
  *do **not** allow type of antibiotic ignore number of antibiotics allow type of paper*
- size of discs
  ignore number / position of discs
- (incubation) temperature
- incubated for same time / 3 days
  allow left / kept for same time
- type of agar
  ignore references to bacteria or petri dishes

1

(b) (i) D

1

(ii) C

1

(iii) B

no marks if wrong antibiotic

1

both had a large clear area around the disc

allow a description of this, eg B had the 2nd largest clear area with E.coli and the largest clear area on S.aureus

or

killed a lot of both bacteria

1

(c) resistant

1

[6]

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