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

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Name of the Student:_____
Max. Marks : 18 Marks **Time : 18 Minutes**

Mark Schemes

Q1.

(a) any **three** from:

- vaccine is inactive / dead form of (pathogen)
  allow antigens
- stimulates antibody production
- stimulates antitoxin production
- by white cells
- antibodies kill (pathogen)
- antitoxins neutralise poisons
- antibodies quickly produced on reinfection
  ignore antibodies remain in blood
- reference to ingestion by white cells

3

(b) (i) (no)

any **two** from

- sample size small / only 12
- conclusion based on hearsay from parents
- only 8 parents linked autism to MMR
- no control used

2

(ii) (yes)
being paid by parents / lawyers

1

[6]

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Q2.

mutation or description of mutation (gives resistance to penicillin)

1

some survive (penicillin)

1

(survivors) reproduce **or** multiply

1

asexual reproduction **or** binary fission **or** cloning

accept mitosis

1

gene for resistance **or** the mutation is passed on (to offspring)

allow reference to bacteria being immune

ignore reference to survival of fittest

1

[5]

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Q3.

(a) antibodies;

if incorrect term used then penalise in (a) then regard as continuous error for rest of question

1

(b) antibodies remain (for several years)
or are not removed

*accept last a long time **or** not destroyed*
***or** continues to make antibodies*
***or** causes increased number of antibodies **or** more antibodies*
***or** stays in body **or** person has made own antibodies*
***o**r if memory cells named must link to antibody production*

1

(c) antibodies removed (from blood);

*accept destroyed **or** unable to make **or** replace antibodies **or** they are not human antibodies **or** person has not made own antibodies*

1

(d) so more antibodies made;

*accept so enough antibodies made **or** so correct amount of antibodies present **or** to keep antibodies high **or** so body keeps making antibodies*

1

(e) any **two** from

already has tetanus bacteria in body;

*accept could boost infection **or** make it worse*

would take too long **or**
a long time for antibodies to be made;

*accept too slow forming antibodies **or** cannot form correct amount of antibodies*

disease would have effect before
antibodies made;

*accept antibodies are specific **or** will work for one disease but not another*

2 max

(f) injection of ready made antibodies;

*accept does not have to wait for antibody formation **or** has large amount of antibodies quickly*
***or** has enough antibodies quickly*
***or** antibodies start working straight away*

1

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