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

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

Mark Schemes

Q1.

(a) dead or inactive or weak form of pathogen / bacterium / virus / microorganism introduced
ignore disease / germ
1

(stimulates) white cells / lymphocytes / leucocytes
accept B and T cells
ignore phagocytes
1

to produce antibodies
ignore antitoxins / antigens
1

antibodies made quickly on re-infection / idea of memory cells
ignore already has antibodies
ignore 'body remembers'
1

(b) (i) alters / causes chemical processes / body chemistry
ignore craving / withdrawal symptoms
1

(ii) any **two** from:

- combined molecule / vaccine stimulates antibody production
- if nicotine taken, antibodies bind to nicotine molecules
  ignore destroys nicotine
- making them too large to get to brain / making them ineffective
  allow prevents nicotine entering brain

2

[7]

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Q2.

(a) (i) dead / inactive / weakened

allow antigen / protein

ignore ref to other components

ignore small amount

1

pathogen / bacterium / virus / microorganism

ignore germs / disease

1

(ii) *antigen / antibiotic instead of antibody = max 2*

white blood cells produce / release antibodies

accept lymphocytes / leucocytes / memory cells produce antibodies
*do **not** accept phagocytes*

1

antibodies produced quickly

1

(these) antibodies destroy the pathogen

allow kill
*do **not** accept antibodies engulf pathogens*

1

(b) (i) (live) bacteria still in body

ignore numbers

1

would reproduce

ignore mutation / growth

1

(ii) antibiotics / treatment ineffective **or** resistant pathogens survive

accept resistant out compete non-resistant

1

these reproduce

1

population of resistant pathogens increases

allow (resistant pathogens reproduce) rapidly

1

[10]

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