

Name of the Student: _____

Max. Marks : 18 Marks

Time : 18 Minutes

Mark Schemes

- Q1.
- (a) antibodies
- allow antitoxins / memory cells*
- do **not** allow antigens*
- 1
- immune
- ignore protection*
- allow resistant*
- 1
- (b) (i) fell
- 1
- numerical qualification to zero / nothing / by 100%
- allow stopped in 1995*
- 1
- (ii) (no)
- ignore circle*
- 1
- % vaccination fell **or** when no vaccination
- but autism numbers did not fall / stayed high / increased
- or**
- ‘(yes) might support it if time lag between vaccination and autism symptoms’ / ‘time lag for diagnosis’ (1)
- 6 year time lag quantified (1)
- 1
- [6]

Q2.

(a) any **two** from:

virus is neutral

- resistant to (most) antibiotics
- contagious **or** easily passed on **or** reference to open wounds
- patients ill therefore less able to combat disease

2

(b) (i) chloride of lime / hand washing killed bacteria (picked up from corpses)
allow disease / germs / infection / disinfectants

1

(ii) people to wash hands after contact with patient

1

so bacteria / pathogen / MRSA not transferred to other patient

1

[5]

Q3.

- (a) (i) viruses live inside cells 1
- viruses inaccessible to antibiotic
allow drug / antibiotic (if used) would (have to) kill cell 1
- (ii) mutation 1
- ignore mutation caused by antibiotic* 1
- natural selection **or** no longer recognised by antibiotics
accept description of natural selection 1
- (b) (stimulate) antibody production 1
- ignore antitoxin* 1
- (by) white cells 1
- rapidly produce antibody on re-infection 1
- ignore antibodies remain in blood* 1

[7]