10.2 Antibiotics

Question Paper

Course	CIE A Level Biology (9700) exams from 2022
Section	10. Infectious Diseases
Topic	10.2 Antibiotics
Difficulty	Easy

Time allowed: **10**

Score: **/5**

Percentage: **/100**

Question 1

Streptomycin, a type of antibiotic, is now less effective in treating TB worldwide.

Which of the following could be a reason for this?

A There is an increase in the number of people infected with drug-resistant strains.

B The incidence of HIV infection is increasing, activating previously inactive *Mycobacterium* infections.

C Fewer people are living in isolated rural areas and overcrowding occurs in inner cities.

D Antibiotics such as streptomycin are not effective as antiviral drugs.

[1 mark]

Question 2

Some antibiotics are used in animal feed to help prevent disease.

Which statement explains why they should not be used to treat bacterial infections in humans?

A Useful gut bacteria may be killed by these antibiotics.

B Pathogenic bacteria may develop resistance to these antibiotics.

C Human cells may stop responding to these antibiotics.

D Humans may be allergic to these antibiotics.

[1 mark]

Question 3

When a patient is prescribed a course of antibiotics they must take them at evenly spaced intervals.

Why is this necessary?

A To select and kill the resistant strains of bacteria.

B To prevent the development of resistant strains of bacteria.

C To maintain the concentration of antibiotic in the body which is lethal to the bacteria.

D To increase the concentration of antibiotic slowly to a level that is lethal to the bacteria.

[1 mark]

Question 4

Which of these diseases are likely to be effectively treated with antibiotics?

	cholera	TB	malaria
A	✓	X	✓
B	✓	✓	✓
C	✓	✓	X
D	✓	X	X

[1 mark]

Question 5

Which of these diseases can be treated with antibiotics?

A smallpox and cholera

B cholera and tuberculosis

C measles and smallpox

D measles and tuberculosis

[1 mark]