

10.2 Antibiotics

Question Paper

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| Course | CIEA Level Biology |
| Section | 10. Infectious Disease |
| 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]