10.2 Antibiotics

Question Paper

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

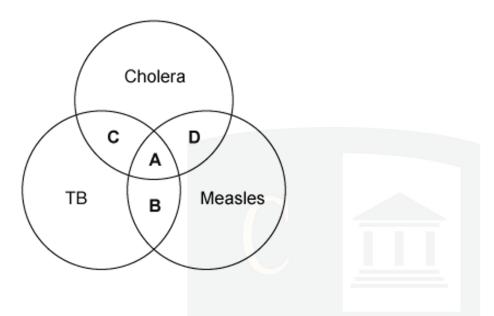
Time allowed: 10

Score: /5

Percentage: /100

Question 1

Which of these diseases can be cured with antibiotics?



[1 mark]

Question 2

Bacteria and viruses are the main pathogens in humans. Antibiotics can be used to treat bacterial infections but not viral infections.

Which of the following statements explains why?

- A Viruses need a host to survive.
- **B** Viruses consist of just nucleic acid and a protein coat.
- **C** Bacteria have peptidoglycan cell walls.
- D Viruses are significantly smaller than bacteria.

[1 mark]

Question 3

Antibiotics can interfere with aspects of growth or metabolism in bacterial cells.

Which of the following is not a mode of action of antibiotics?

- A Preventing the synthesis of proteins
- **B** Preventing enzyme action
- C Preventing DNA synthesis
- **D** Preventing the production of cellulose cell walls

[1 mark]

Question 4

Some bacteria have developed a resistance to penicillin.

Which of the following would explain how bacteria can prevent the action of penicillin?

- A production of mRNA
- **B** production of β-lactamase
- c production of peptidoglycan
- **D** production of phospholipids

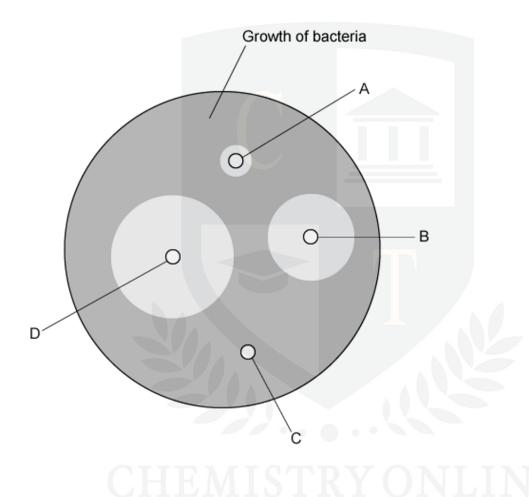
[1 mark]

Question 5

An antibiotic sensitivity test was performed on bacteria isolated from a patient's throat.

The diagram shows the results of the four antibiotics tested.

Which one should be used to treat the disease?



[1 mark]