

# Chapter 15

## Drugs

### 15.2 Medicinal drugs

01. 0610\_m21\_qp\_22 Q: 28

How do some antibiotics kill bacteria?

- A** They damage the cell wall.
- B** They damage the endoplasmic reticulum.
- C** They damage the nucleus.
- D** They damage the protein coat.

---

02. 0610\_w21\_qp\_23 Q: 27

How can the development of antibiotic resistance in bacteria be reduced?

- A** treating every disease with antibiotics
  - B** treating infections caused by a virus with antibiotics
  - C** using antibiotics only when essential
  - D** using antibiotics regularly to prevent disease
-

03. 0610\_m20\_qp\_22 Q: 29

Bacteria such as MRSA are resistant to several different antibiotics. Some suggested actions for reducing the development of antibiotic resistance in bacteria are listed.

- 1 Only use antibiotics when necessary.
- 2 Only use antibiotics on resistant bacteria.
- 3 Do not use antibiotics to treat viral infections.

Which of the suggested actions are correct?

- A** 1, 2 and 3    **B** 1 and 2 only    **C** 1 and 3 only    **D** 2 and 3 only
- 

04. 0610\_s20\_qp\_21 Q: 27

The statements are about the use of antibiotics.

- 1 using an antibiotic to prevent infection
- 2 using an antibiotic known to kill the bacteria causing an infection
- 3 using an antibiotic only when essential
- 4 using an antibiotic to treat a viral infection

Which practices will increase the chance of the development of antibiotic resistance in bacteria?

- A** 1, 2, 3 and 4    **B** 1 and 4 only    **C** 2 and 3 only    **D** 2 and 4 only
- 

05. 0610\_w20\_qp\_22 Q: 26

Which characteristic of viruses prevents them from being affected by antibiotics?

- A** They cannot reproduce on their own.  
**B** They contain DNA or RNA.  
**C** They have no cell structure.  
**D** They are much smaller than bacteria.
- 

06. 0610\_m19\_qp\_22 Q: 28

What type of organism is MRSA?

- A** bacterium  
**B** fungus  
**C** protoctist  
**D** virus
-

15.2. MEDICINAL DRUGS

07. 0610\_s19\_qp\_23 Q: 28

Which statement about antibiotics is correct?

- A** Antibiotics are effective against viral diseases.
  - B** Antibiotics are produced by white blood cells.
  - C** Antibiotics can provide pain relief.
  - D** Antibiotics can stop bacteria making new cell walls.
- 

08. 0610\_s19\_qp\_23 Q: 35

These events may happen when an antibiotic is used to treat a bacterial infection.

- 1 The antibiotic kills most of the bacteria.
- 2 The antibiotic resistant bacteria reproduce.
- 3 The antibiotic resistant bacteria survive.
- 4 Some bacteria mutate and are resistant to the antibiotic.

Which sequence may produce a strain of antibiotic resistant bacteria?

- A** 1 → 2 → 3 → 4
  - B** 2 → 3 → 1 → 4
  - C** 3 → 1 → 4 → 2
  - D** 4 → 1 → 3 → 2
- 

09. 0610\_w19\_qp\_21 Q: 26

Which statement is a reason why viruses are unharmed by antibiotics such as penicillin?

- A** They are very small in size.
  - B** They do not have a cell wall.
  - C** They have genetic material.
  - D** They have a protein coat.
-

10. 0610\_w19\_qp\_22 Q: 26

Bacteria such as MRSA are resistant to antibiotics.

These processes can occur in bacteria.

- 1 artificial selection
- 2 genetic variation
- 3 mutation
- 4 natural selection

What would contribute to the development of antibiotic resistance?

- A 1, 2, 3 and 4
  - B 1, 2 and 3 only
  - C 2, 3 and 4 only
  - D 2 and 4 only
- 

11. 0610\_w19\_qp\_23 Q: 26

Which statement about antibiotics is correct?

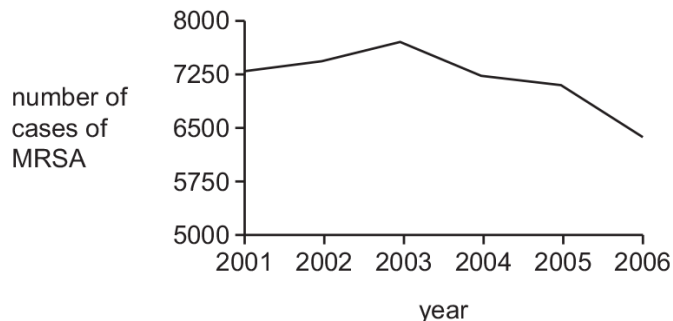
- A Antibiotics are used to treat all transmissible diseases.
  - B Antibiotics are used to treat diseases caused by viruses.
  - C Antibiotic resistance can be stopped by increasing their use.
  - D Antibiotics are used to treat diseases caused by bacteria.
- 

**Ace | GCSE**  
Paper Perfection, Crafted With Passion

15.2. MEDICINAL DRUGS

12. 0610\_w18\_qp\_21 Q: 26

The graph shows the number of cases of MRSA in one country between 2001 and 2006.



Between which years was the **greatest** change in the number of cases of MRSA seen?

- A 2002 and 2003
  - B 2003 and 2004
  - C 2004 and 2005
  - D 2005 and 2006
- 

13. 0610\_s17\_qp\_21 Q: 26

Which statement about microorganisms is correct?

- A Bacteria are killed by hydrochloric acid in the duodenum.
  - B Bacteria can become resistant to antibiotics.
  - C Bacterial infection and viruses are treated with antibiotics.
  - D Bacteria produce sugars that cause tooth decay.
- 

14. 0610\_s17\_qp\_21 Q: 35

The number of bacteria resistant to antibiotics is increasing.

What has contributed to this situation?

- A choosing the antibiotic carefully to match the strain of bacterium
  - B not completing the course of prescribed antibiotics
  - C tracing, testing and treating people who have been in contact with the infected person
  - D using antibiotics only when essential
-

15. 0610\_s17\_qp\_22 Q: 26

Penicillin is an antibiotic that kills bacteria by preventing them from forming cell walls.

Why does penicillin **not** affect viruses?

- A Viruses become resistant to penicillin.
- B Viruses do not contain cytoplasm.
- C Viruses do not have cell walls.
- D Viruses reproduce very rapidly.

16. 0610\_w17\_qp\_22 Q: 27

The graph shows the number of deaths from MRSA infection per 100 000 people in a population of over-65-year-olds from 2005 to 2012.



What is a possible explanation for the changes shown in the graph?

- A a decrease in the size of the population of over-65-year-olds
- B antibiotics do not affect viruses
- C more effective antibiotics are being used to treat infected people
- D over-65-year-olds are immune to MRSA infection

17. 0610\_p16\_qp\_20 Q: 33

Antibiotics often do not work as effectively against bacterial infections as they used to.

What change has taken place in the bacteria, and what type of selection has brought this about?

	change in the bacteria	type of selection
A	have become immune to the antibiotic	artificial
B	have become immune to the antibiotic	natural
C	have become resistant to the antibiotic	artificial
D	have become resistant to the antibiotic	natural

15.2. *MEDICINAL DRUGS*

18. 0610\_s16\_qp\_22 Q: 26

Which statement about antibiotics is **not** correct?

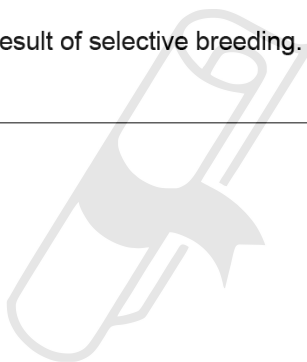
- A** Antibiotics are used to treat diseases caused by viruses.
  - B** Some antibiotics are produced by fungi.
  - C** Some bacteria are resistant to antibiotics.
  - D** When taking antibiotics for an infection, the treatment should be completed.
- 

19. 0610\_s16\_qp\_22 Q: 34

Some disease-causing bacteria survive treatment with an antibiotic.

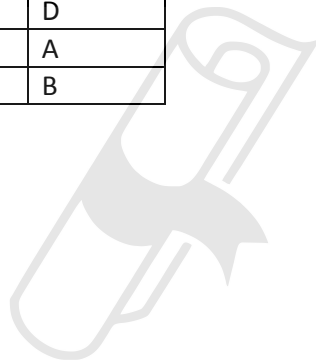
Which statement about the surviving bacteria is correct?

- A** The antibiotic will work better on the next generation of bacteria.
  - B** The bacteria have undergone a process of natural selection.
  - C** The bacteria will now be resistant to all antibiotics.
  - D** The resistance of the bacteria is a result of selective breeding.
- 



**Ace | GCSE**  
Paper Perfection, Crafted With Passion

SN	Paper	Q. No.	Answer
01	0610_m21_qp_22	28	A
02	0610_w21_qp_23	27	C
03	0610_m20_qp_22	29	C
04	0610_s20_qp_21	27	B
05	0610_w20_qp_22	26	C
06	0610_m19_qp_22	28	A
07	0610_s19_qp_23	28	D
08	0610_s19_qp_23	35	D
09	0610_w19_qp_21	26	B
10	0610_w19_qp_22	26	C
11	0610_w19_qp_23	26	D
12	0610_w18_qp_21	26	D
13	0610_s17_qp_21	26	B
14	0610_s17_qp_21	35	B
15	0610_s17_qp_22	26	C
16	0610_w17_qp_22	27	C
17	0610_p16_qp_20	33	D
18	0610_s16_qp_22	26	A
19	0610_s16_qp_22	34	B



# AcelGCSE

Paper Perfection, Crafted With Passion