

Drugs

Question Paper 1

Level	IGCSE
Subject	Biology (0610/0970)
Exam Board	Cambridge International Examinations (CIE)
Topic	Drugs
Sub-Topic	Drugs
Booklet	Question Paper 1

Time Allowed: 35 minutes

Score: /29

Percentage: /100

Grade Boundaries:

9	8	7	6	5	4	3	2	1
>85%	75%	68%	60%	53%	48%	40%	33%	<25%

- 1 Which organ is most often damaged by regularly drinking too much alcohol?
 - A heart
 - B liver
 - C pancreas
 - D stomach

- 2 Which organ breaks down heroin and alcohol?
 - A bladder
 - B brain
 - C kidney
 - D liver

- 3 What is a result of the excessive intake of alcohol?
 - A improved self-control
 - B liver damage
 - C reduced chance of HIV infection
 - D shorter reaction time

- 4 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.

5 Possible effects of drug abuse include

- 1 addiction,
- 2 reduced self-control,
- 3 severe withdrawal symptoms.

Which effects may occur as a result of drinking too much alcohol?

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

6 What is **not** an effect of consumption of alcohol?

- A** liver damage
- B** loss of muscle coordination
- C** poor self control
- D** stimulation of the nervous system

7 A woman has been smoking heavily for many years.

Which statement could **not** be correct?

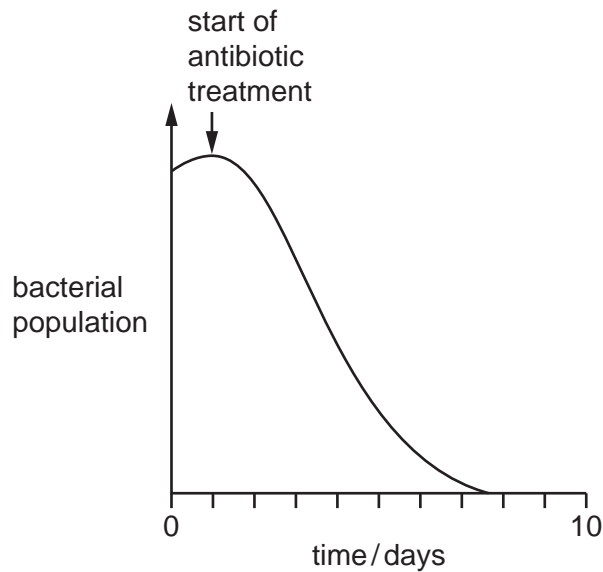
- A** Her arteries are blocked with tar.
- B** She is addicted to nicotine.
- C** The cilia in the trachea have been destroyed.
- D** The surface area of the lungs is reduced.

8 The oxygen carrying capacity of the blood of smokers is less than that of non-smokers.

Which component of cigarette smoke causes this?

- A** carbon monoxide
- B** nicotine
- C** smoke particles
- D** tar

9 The graph shows the effect of an antibiotic treatment on bacterial populations in the blood.



What conclusion can be drawn from the graph?

- A** Antibiotics are effective against viral and bacterial infections.
- B** Antibiotics cause reduction division in bacteria.
- C** Antibiotics take ten days to kill all bacteria.
- D** Before the start of antibiotic treatment the bacterial population was rising.

10 Which two statements describe the effects of smoking cigarettes?

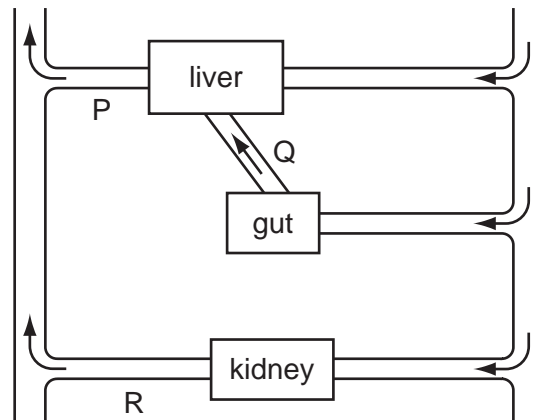
- 1 Cilia beat more quickly.
- 2 Cilia beat more slowly.
- 3 Goblet cells stop producing mucus.
- 4 Goblet cells produce more mucus.

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

11 What are the effects of tobacco smoke on the gas exchange system?

	mucus in the airways	chance of lung infection
A	decreased	decreased
B	decreased	increased
C	increased	decreased
D	increased	increased

12 The diagram represents some human organs and their blood vessels.



Immediately after taking an alcoholic drink, how would the levels of alcohol compare in blood vessels P, Q and R?

	P	Q	R
A	high	medium	high
B	medium	high	low
C	low	low	medium
D	high	low	low

13 In which part of the body do drugs break down?

- A brain
- B heart
- C kidneys
- D liver

14 What are the effects of smoking on the gas exchange system?

	mucus in the airways	chance of lung infection
A	decreased	decreased
B	decreased	increased
C	increased	decreased
D	increased	increased

15 Where do the breakdown of drugs and the storage of urine occur?

	breakdown of drugs	storage of urine
A	kidney	muscles
B	liver	bladder
C	liver	kidney
D	muscles	liver

16 In which organ is alcohol broken down?

- A brain
- B kidney
- C liver
- D stomach

17 Capillaries near the surface of the skin become wider after drinking large amounts of alcohol.

Why does this cause the body temperature to drop?

- A** It allows heat to be lost rapidly from the skin.
- B** It causes vasoconstriction.
- C** It prevents vasodilation.
- D** It stops the person from sweating.

18 Cilia are present on the surface of the cells of the trachea. The cilia of a smoker work less effectively than those of a non-smoker.

How does this affect the smoker?

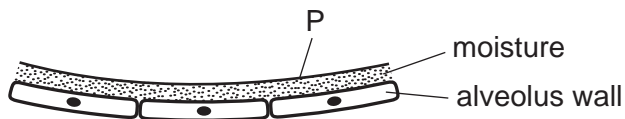
- A** Less carbon dioxide is released.
- B** Less oxygen is released.
- C** More bacteria enter the lungs.
- D** More mucus is removed from the lungs.

19 Which component of cigarette smoke is most likely to cause lung cancer?

- A** carbon dioxide
- B** carbon monoxide
- C** nicotine
- D** tar

20 The diagram shows the gas exchange surface of a person who has just smoked a cigarette.

Substance P can cause cancer.



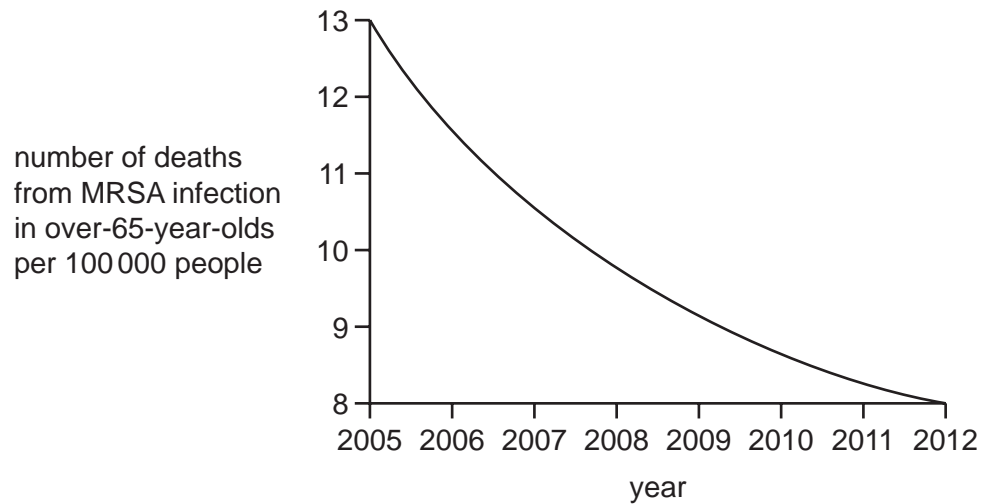
What is substance P?

- A** carbon dioxide
- B** carbon monoxide
- C** nicotine
- D** tar

21 Which row states the possible harmful effects of tobacco smoke?

	cancer	liver damage	coronary heart disease
A	✓	✓	x
B	✓	x	✓
C	x	✓	x
D	x	x	✓

- 22 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
- 23 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.

24 Which disease can be caused by smoking tobacco?

- A cholera
- B COPD
- C HIV
- D scurvy

25 Which row shows the effects of excessive alcohol consumption?

	reaction time	self-control	anti-social behaviour
A	quicker	increased	increased
B	quicker	reduced	increased
C	slower	increased	decreased
D	slower	reduced	increased

26 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

27 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.

28 A patient is suffering from an infection. Her doctor prescribes an antibiotic.

One week later the infection is still present.

What could be the reason for this?

- A It was the correct antibiotic for this infection.
- B The pathogen was a virus.
- C The pathogen was resistant to the antibodies.
- D The patient was resistant to the antibiotic.

29. What results from the destruction of cilia in the trachea due to smoking?

- A Cilia cannot filter bacteria.
- B Cilia cannot trap dust.
- C Mucus cannot be manufactured.
- D Mucus cannot be carried towards the throat.