Excretion in Humans

Question Paper 1

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

Time Allowed: **24 minutes**

Score: **/20**

Percentage: **/100**

Grade Boundaries:

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

1 Which diet will cause the liver to produce the most urea?

A high carbohydrate, low fat

B high fat, high fibre

C high fat, low protein

D high protein, low carbohydrate

2 What is an example of excretion in mammals?

A the release of hormones from glands

B the release of saliva into the mouth

C the removal of undigested food through the anus

D the removal of urea by the kidneys

3 Where is urea formed?

A kidneys

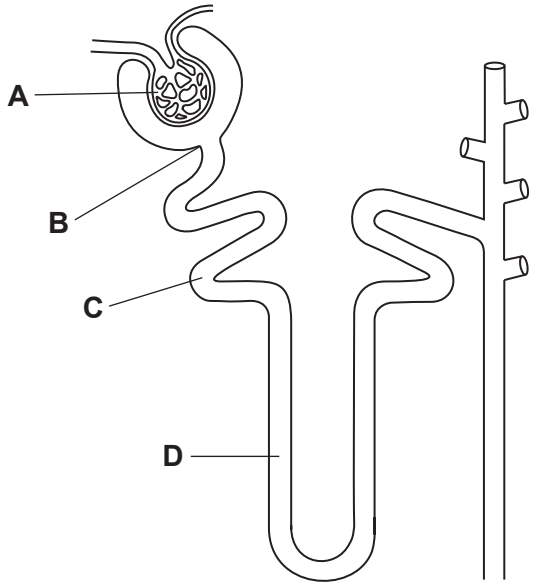
B liver

C muscles

D small intestine

4 The diagram shows the structure of a kidney tubule.

Where does filtration occur?



5 Which substance is lost from the body of a healthy person by the kidneys, but **not** by the lungs?

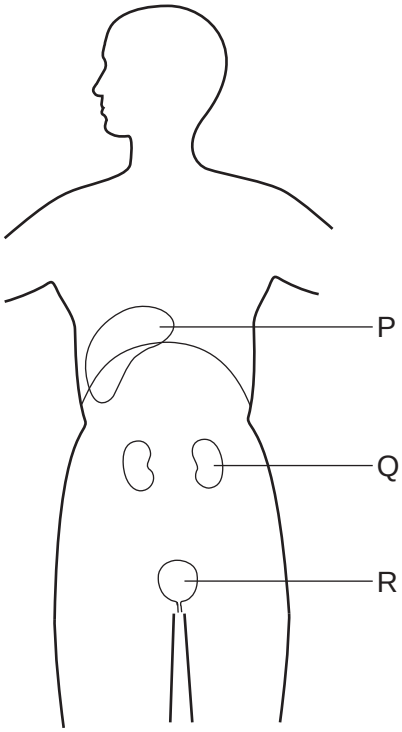
A carbon dioxide

B glucose

C urea

D water

6 The diagram shows some organs in which urea is found.



Which organ makes urea, and which organ removes it from the blood?

	makes urea	removes urea from blood
A	P	Q
B	Q	Q
C	Q	R
D	R	P

7 What is a function of the kidneys of a healthy person?

A break down toxins

B eliminate all salts

C reabsorb all glucose

D retain all water

8 Where are hormones removed from the blood and broken down in the human body?

A gall bladder

B kidneys

C liver

D stomach

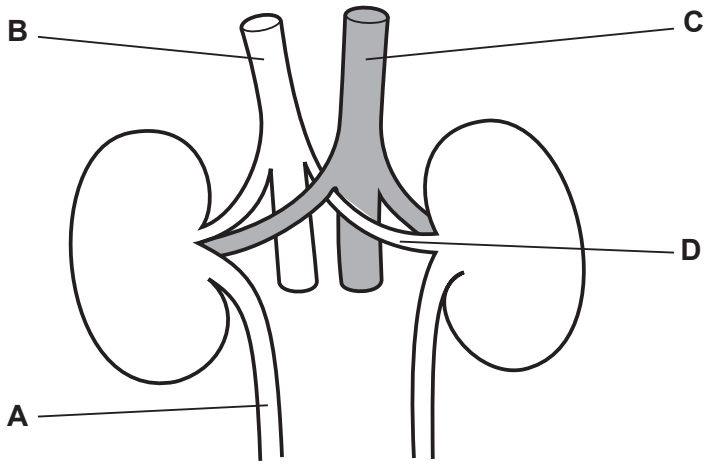
9 Where is urea produced in the human body and from which chemicals is it produced?

	produced	chemical
A	intestine	proteins
B	kidneys	amino acids
C	kidneys	fatty acids
D	liver	amino acids

10 The table shows the composition of a liquid found in the human body.

component	concentration / arbitrary units
amino acids	0.00
glucose	0.00
proteins	0.00
salts	1.50
urea	2.00

In a healthy person, which structure contains this liquid? **B**



11 Which function does **not** occur in the kidneys?

A breakdown of alcohol

B removal of excess salts from the blood

C removal of excess water from the blood

D removal of urea from the blood

12 What is urea formed from?

A amino acids

B fatty acids

C glucose

D glycerol

13 Which two substances are both reabsorbed in the kidneys?

A glucose and salts

B glucose and starch

C glycogen and salts

D glycogen and starch

14 Which organ makes urea?

A bladder

B kidney

C liver

D stomach

15 What is the function of the kidney?

A making glucose and reabsorbing urea

B making urea and removing salts

C removing glucose and reabsorbing salts

D removing urea and reabsorbing glucose

16 How is urea removed from the body?

A as insoluble waste

B by being destroyed in the liver

C in expired air

D in solution

17 How does blood change as it passes through a kidney?

A It gains glucose.

B It gains salts.

C It loses protein.

D It loses urea.

18 The table shows the percentage composition of some chemicals found in blood entering the kidney of a healthy person.

chemical	composition in blood entering kidney / %
glucose	0.10
protein	8.00
urea	0.03

What is the percentage composition of the same chemicals in the urine of a healthy person?

	composition in urine / %		
	glucose	protein	urea
A	1.00	4.00	0.03
B	0.00	4.00	0.00
C	0.00	0.00	2.00
D	0.10	8.00	2.00

19 Which organs remove excretory products from the blood?

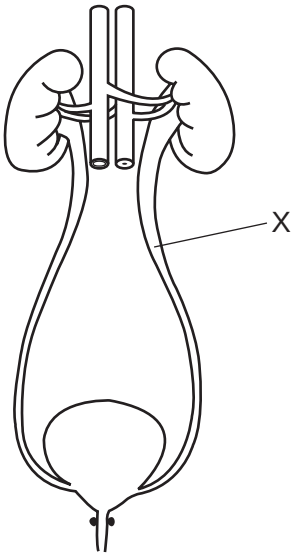
A bladder and liver

B bladder and lungs

C kidneys and bladder

D lungs and kidneys

20 The diagram shows the human urinary system.



What is the part labelled X?

A renal artery

B renal vein

C ureter

D urethra