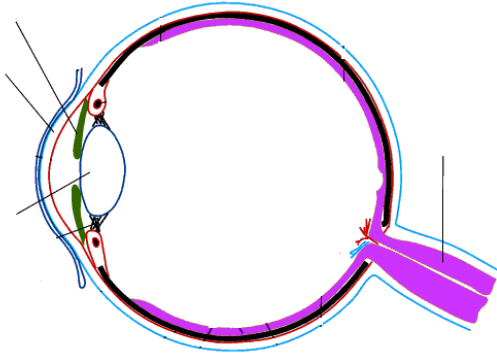


B1d-f assessed task

Q1) a) Use the following words to label the diagram of the eye:

Iris, cornea, lens, optic nerve



[4]

b) Explain the function of each part of the eye:

Iris.....
Cornea.....
Lens.....
Optic nerve.....

[4]

Q2) Give an example of a:

- stimulus:
- sensor:
- effector:

[3]

Q3) Neurones are highly adapted to the job that they do. List one way in which a neurone is adapted to its job.

[1]

Q4) For each of the following drugs, describe its effect on the human body.

- depressant:
- pain killer:
- stimulant:
- performance enhancer:

[4]

Q5) Smoking can cause harmful diseases.



Circle all the diseases that can be caused by smoking:

- | | |
|--------------------|-------------|
| A Cancer | D Malaria |
| B Bronchitis | E Emphysema |
| C Colour blindness | |

[3]

Q6) Alcohol consumption is measured in units.



One pint of beer = 1 unit.

- a) How many units are there in 3 pints of beer?
- b) If a person drinks 3 pints of beer a night, how many units will they consume in one week?

[2]

Q7) Homeostasis is when the body maintains a constant internal environment.

a) List three things the human body works to keep constant:

-
-

-

b) What is normal body temperature for humans?

[4]

Q8) Hormones are chemicals produced by the body.

a) How do hormones travel around the body?

b) State one difference between hormones and neurones?

[2]

Q9) Oestrogen and testosterone are sometimes called the secondary sexual hormones.

a) Explain what this means.

b) Describe the effects on a young teenager of:

i) Oestrogen:

ii) Testosterone:

[3]

Q10)

Many people are very overweight.

(a) One way to lose weight is to eat less sugar.

What does the body use sugar for?

Put a ring around the answer in this list.

to provide energy for growth and repair to prevent constipation

[1]

(b) People often try different diets to lose weight.

One new idea is called the GI diet.

Every food has a GI number.

The higher the number the faster the sugar level in the blood increases.

THE GI RATING

The Glycaemic Index (GI) measures the rate at which foods raise blood sugar levels. Foods are scored on a scale ranging from 1 to 100.

LOW 0 – 54

Broccoli	(10)
Peanuts	(14)
Low fat yoghurt	(33)
Wholemeal spaghetti	(37)
Apples and pears	(38)
Porridge	(42)
Stoneground wholemeal bread	(53)

MEDIUM 55 – 69

Honey	(58)
Basmati rice	(58)
New potatoes	(62)
Muesli	(66)
Pineapple	(66)

HIGH 70 – 100

White bread	(70)
Short grain white rice	(72)
Watermelon	(72)
Doughnuts	(76)
Cornflakes	(84)
Baked potatoes	(93)

Liz eats a meal of doughnuts and pineapple.

John eats some low fat yoghurt and honey.

Whose blood sugar level is likely to increase faster?

Explain how you decided on your answer.

Use the figures from the GI rating table.

.....
..... [2]

(c) Scientists think that the GI diet might help prevent people from becoming diabetic.

Finish the following sentences about diabetes.

Choose from this list.

insulin

oestrogen

pancreas

stomach

testis

testosterone

Diabetes is caused by lack of the hormone

This hormone is made in the [2]

(d) When food passes through the digestive system sugar passes into the bloodstream.

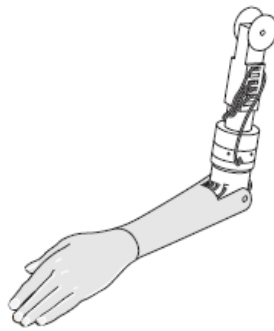
Describe **where** and **how** this happens.

.....
.....
..... [2]

[Total: 7]

Q11)

Claudia had a motor-cycle accident and had to have one of her arms removed.
This arm has been replaced by an artificial arm.



Scientists have managed to reconnect Claudia's nerves to the artificial arm.
Claudia can now control the movement of her artificial arm by thinking about it.

(a) What type of signals pass along nerves?

Put a **ring** around the correct answer in this list.

chemical reactions

electrical impulses

hormones

[1]

(b) The nerves to Claudia's arms are connected to her central nervous system (CNS).

Write down the name of **one** part of the CNS.

..... [1]

(c) The nerves in Claudia's healthy arm contain different types of nerve cells (neurones).

Look at the list of neurones.

motor neurone

relay neurone

sensory neurone

Put a **ring** around the type of neurone that takes signals to Claudia's muscles. [1]

(d) Claudia touches a hot object with her artificial arm.

She does **not** automatically move her arm away.

Suggest why.

.....

..... [1]

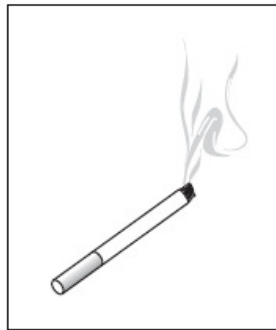
Q12)

This question is about drugs.

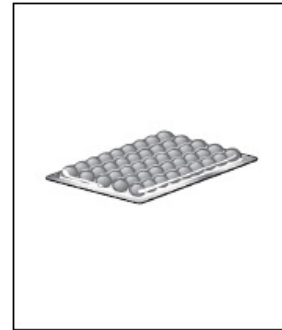
Examples of different drugs are shown below.



alcohol



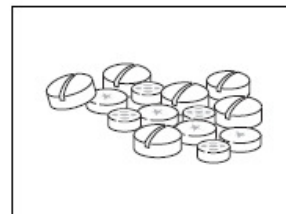
nicotine



LSD



anabolic steroids



ecstasy

(a) Write down one drug from the diagram that is hallucinogenic.

.....[1]

(b) LSD is described as a Class A drug and anabolic steroids as Class C drugs.

Explain why drugs are put in different classes.

.....
.....[2]

(c) Alcohol is a depressant.

Explain how depressants affect the working of the nervous system.

.....
.....
.....
.....[2]

Q13)

Jane wears glasses.

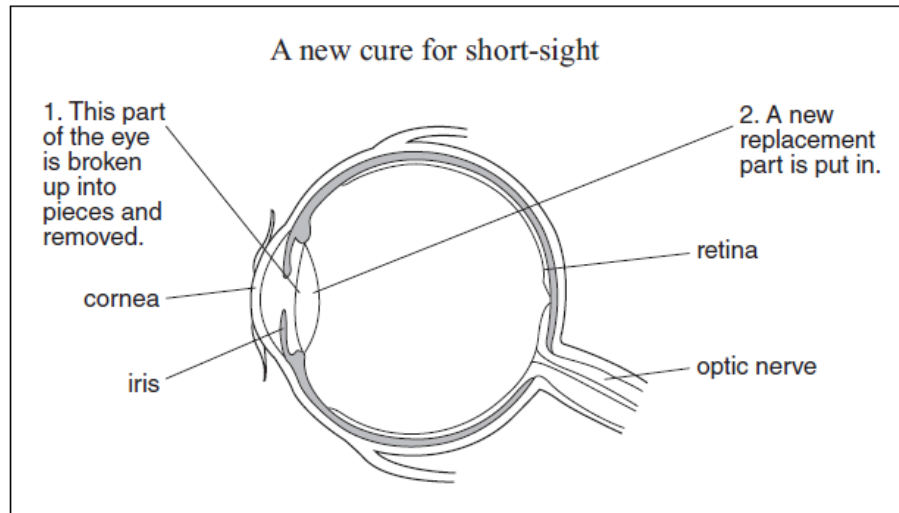
This is because she is short-sighted.



© OCR

Jane reads an article in a newspaper.

It describes a new operation to cure short-sight.



(a) Several parts of the eye are labelled in the diagram.

Describe the function of the following two parts.

- (i) The function of the **cornea** is
 -
 - (ii) The function of the **iris** is
 -
- [2]

(b) Why is the lens replaced in people who are short-sighted?
[1]

(c) Write down **one other type of surgery** that Jane could have to cure her short-sight.
[1]

(d) Other people may be red-green colour blind.
 What is the cause of this?
[1]

END OF TEST