

Q1.(2018)

[1 mark]

fat	fibre	minerals	vitamins
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Q2.(2018)

[1 mark]

skin cancer	type 1 diabetes	type 2 diabetes
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Q3.(2018)

[6 marks]

[illegible]

Q4.(2019)

Organisation

<http://www.pcfgstudy.com>

People with diabetes have difficulty controlling the concentration of glucose in their blood.

The blood of four people was tested.

Table 1 shows the results.

Person	Concentration of glucose in blood in arbitrary units
A	4.2
B	6.9
C	7.1
D	5.1

Table 2 shows the information used to help decide if a person has diabetes.

Concentration of glucose in blood in arbitrary units	Conclusion
<5.6	No diabetes
5.6 to 7.0	Mild diabetes
>7.0	Severe diabetes

Which person has severe diabetes?

[1 mark]

Tick (✓) **one** box.

A ☐ B ☐ C ☐ D ☐

Q5.(2019)

A person may develop other medical conditions.

Draw **one** line from each medical condition to the correct treatment.

[2 marks]

Medical condition	Treatment
High blood cholesterol	Antibiotics
	Artificial pacemaker
Irregular heart rate	Insulin
	Statins

Q6.a)(2021)

Organisation

<http://www.pcfgstudy.com>

Doctors can measure the concentration of cholesterol in the blood.

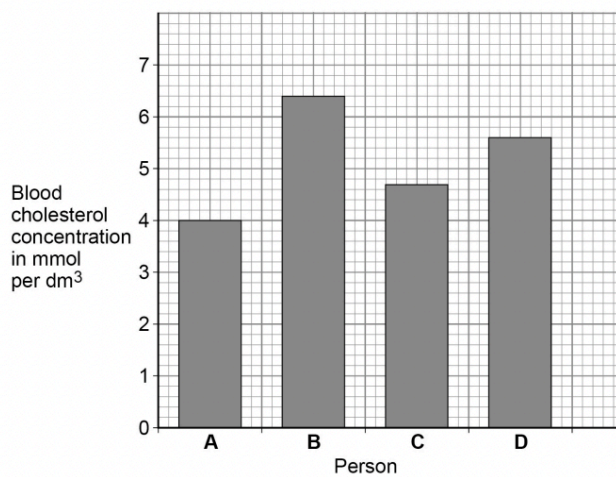
Table 3 shows four different blood cholesterol categories.

Table 3

Blood cholesterol concentration in mmol per dm ³	Cholesterol category
<4.6	Low
4.6–5.0	Normal
5.1–6.1	Medium
6.2 and above	High

Figure 10 shows the blood cholesterol concentration of four people.

Figure 10



Which person is in the medium cholesterol category?

[1 mark]

Tick (✓) **one** box.

A ☐ B ☐ C ☐ D ☐

Q6.b)(2021)

Which person is most at risk of having a heart attack?

[1 mark]

Tick (✓) **one** box.

A ☐ B ☐ C ☐ D ☐

Q6.c)(2021)

Give a reason for your answer to Question 05.3.

[1 mark]

Q6.d)(2021)

The blood cholesterol concentration of person **D** is greater than the blood cholesterol concentration of person **A**.

Calculate how many times greater.

Use **Figure 10**.

[2 marks]

Number of times greater = _____

Q7.a)(2021)

Body Mass Index (BMI) is a way of finding out if a person's body mass falls within a healthy range for their height.

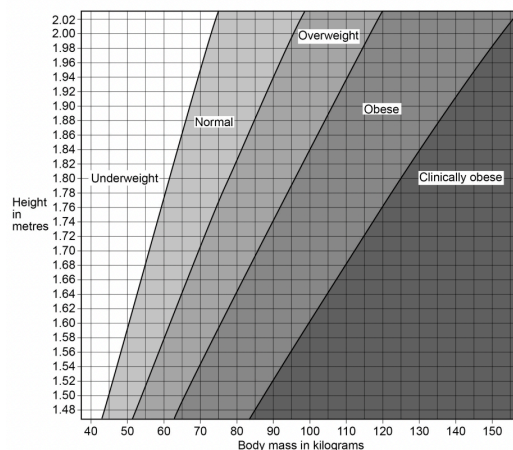
Table 4 shows information about two people.

Table 4

Person	Body mass in kg	Height in m	BMI in kg/m ²
A	63	1.65	23.1
B	92	1.71	X

Figure 18 shows five BMI categories for adults.

Figure 18



Organisation

<http://www.pcfgstudy.com>

Which is the BMI category of person **A** in **Table 4**?

[1 mark]

Tick (✓) **one** box.

Clinically obese

☐

Normal

☐

Obese

☐

Overweight

☐

Underweight

☐

Q7.b)(2021)

Calculate value **X** in **Table 4**.

Use the equation:

$$\text{BMI} = \frac{\text{body mass}}{\text{height}^2}$$

Give your answer to 3 significant figures.

[3 marks]

X = _____ kg/m²

Q7.c)(2021)

Scientists think there is a link between BMI and life expectancy.

Table 5 shows information about predicted life expectancy of men after the age of 50.

Table 5

BMI Category	Predicted number of years living in good health after the age of 50	Predicted number of years living in bad health after the age of 50
Normal	19.06	4.98
Overweight	18.68	5.32
Obese	16.37	7.08
Clinically obese	13.07	10.10

Describe **two** patterns shown in **Table 5** about the effects of BMI category.

[2 marks]

1 _____

2 _____

Q8.(2021)

The number of people who are obese in the UK is increasing.

Explain the financial impact on the UK economy of an increasing number of people who are obese.

[2 marks]

Q9.(2021)

A person who is obese is more at risk of arthritis.

Arthritis is a condition that damages joints.

Suggest how arthritis could affect a person's lifestyle.

[1 mark]

Q10.(2021)

A person who eats a diet high in saturated fat might become obese.

Name **two** health conditions that might develop if a person eats a diet high in saturated fat.

Do **not** refer to arthritis in your answer.

[2 marks]

1

2

Q11.(2023)

Some viruses can cause tumours to develop.

Complete the sentence.

Choose the answer from the box.

[1 mark]

digestion	division	metabolism
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A tumour can form when changes to cells cause uncontrolled

cell

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Q12.(2023)

Malignant tumours are cancers.

Which **two** sentences describe malignant tumours?

[2 marks]

Tick (✓) **two** boxes.

Malignant tumours are only found in the reproductive system.

☐

Malignant tumours contain digestive enzymes.

☐

Malignant tumours do not change in size.

☐

Malignant tumours have cells that can spread to other parts of the body.

☐

Malignant tumours may form secondary tumours.

☐

Q13.(2024)

Cancer occurs when there is uncontrolled cell division.

Which **two** factors can cause cancer?

[2 marks]

Tick (✓) **two** boxes.

Antibiotics

☐

Ionising radiation

☐

Monoclonal antibodies

☐

Salmonella

☐

Viruses

☐

Q14.a)(2024)

Table 5 shows the effect of smoking on the risk of developing different cardiovascular diseases.

Table 5

Cardiovascular disease	Percentage (%) increase in risk compared to people who have never smoked
E	14
F	20
G	29
H	70

Give **two** conclusions that can be made from the data in Table 5.

[2 marks]

1 _____

2 _____

Q14.b)(2024)

Complete **Figure 6**.

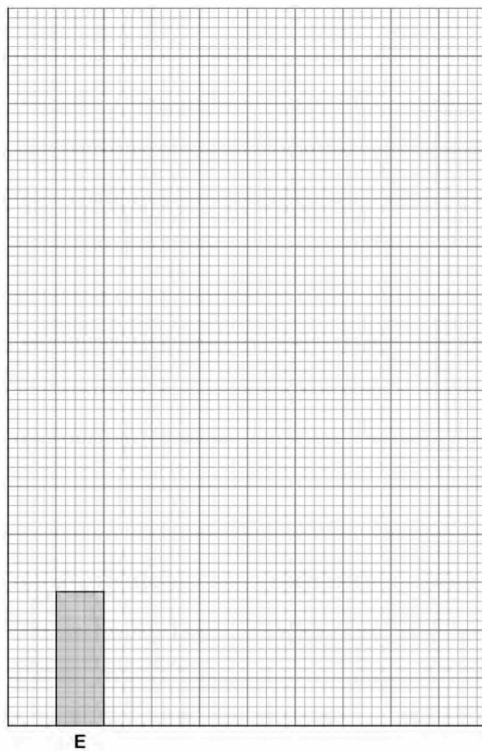
You should:

- label the y-axis
- add the correct scale to the y-axis
- plot the data from **Table 5**
- label each bar.

The bar for cardiovascular disease **E** has been plotted for you.

[4 marks]

Figure 6



Cardiovascular disease

Q14.c)(2024)

Describe **one** lifestyle factor that can increase the risk of cardiovascular disease.

Do **not** refer to smoking in your answer.

[1 mark]
