

Name of the Student: _____

Max. Marks : 17 Marks

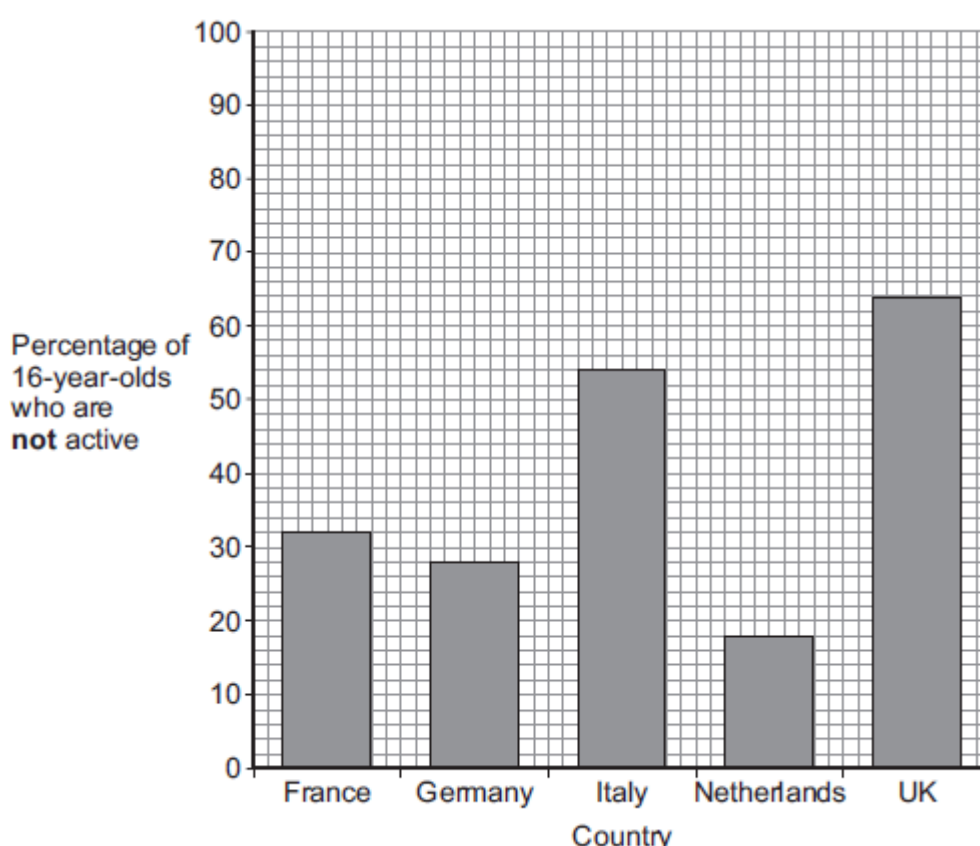
Time : 17 Minutes

Q1.

Scientists investigated the effect of different factors on health.

- (a) People who are **not** active may have health problems.

The graph shows the percentage of 16-year-olds in some countries who are **not** active.



- (i) What percentage of 16-year-olds in the UK are **not** active?

_____ %
(1)

- (ii) What percentage of 16-year-olds in the UK are **active**?

_____ %
(1)

- (iii) A newspaper headline states:

People in the UK are the laziest in the world.

Information in **Figure 1** does **not** support the newspaper headline.

Suggest **one** reason why the newspaper headline may be wrong.

(1)

- (b) Doctors gave a percentage rating to the health of 16-year-olds.
100% is perfect health.

The table shows the amount of exercise 16-year-olds do and their health rating.

Amount of exercise done in minutes every week	Health rating as %
Less than 30	72
90	76
180	82
300	92

What conclusion can be made about the effect of exercise on health?

Use information from the table.

(1)

- (c) Inherited factors can also affect health.

Give **one** health problem that may be affected by the genes someone inherits.

Draw a ring around the correct answer.

being
malnourished

having a high
cholesterol level

having a
deficiency disease

(1)

- (d) White blood cells are part of the immune system.

Use the correct answer from the box to complete each sentence.

antibiotics	antibodies	pathogens	vaccines
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- (i) When we are ill, white blood cells produce _____ to kill microorganisms.

(1)

- (ii) Many strains of bacteria, including MRSA, have developed resistance to drugs called

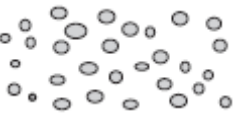
(1)

(Total 7 marks)

Q2.

- (a) (i) Blood is part of the circulatory system.

Draw **one** line from each part of the blood to its correct function.

Part of the blood	Function
 White blood cells	carry glucose around the body
 Red blood cells	carry oxygen around the body
 Platelets	help the blood to clot
	destroy microorganisms

(3)

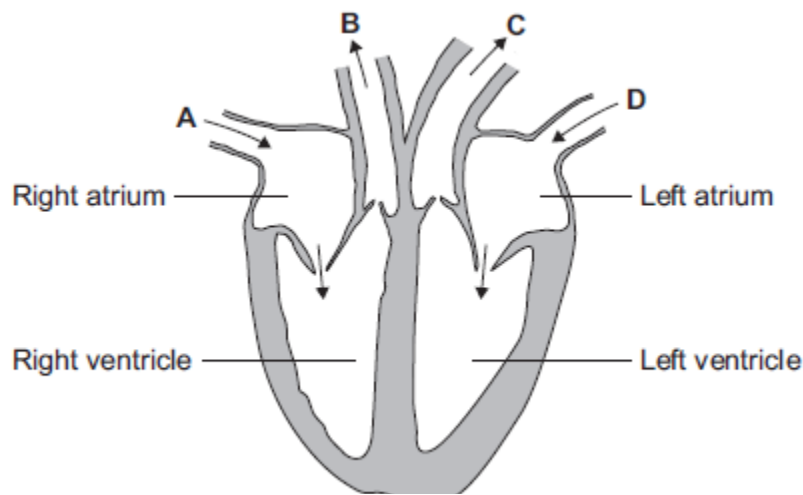
- (ii) Name **one** waste product that is transported by the blood plasma.

(1)

- (b) The heart is also part of the circulatory system.

Figure 1 shows a section through the human heart.

Figure 1



- (i) Which arrow, **A**, **B**, **C** or **D**, shows blood leaving the heart in the pulmonary artery to go to the lungs?

(1)

- (ii) Which arrow, **A**, **B**, **C** or **D**, shows blood from the lungs entering the heart in the pulmonary vein?

(1)

- (iii) Valves in the circulatory system make sure blood only travels in one direction.
Name the type of blood vessel that has valves.

(1)

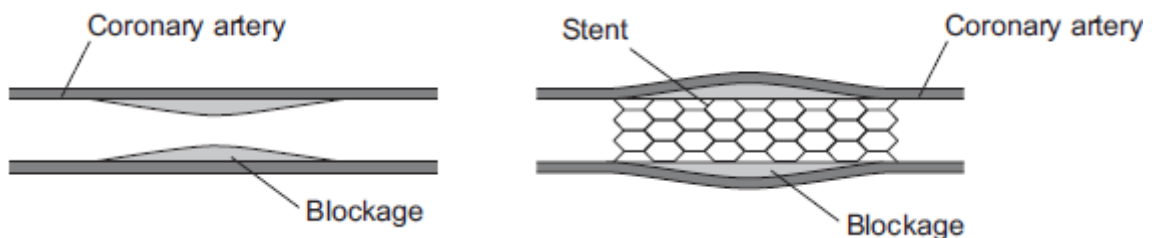
- (c) A person's coronary artery has become narrower.

The person has a heart attack.

A doctor puts a stent into the person's coronary artery.

Figure 2 shows a stent inside a coronary artery.

Figure 2



- (i) How does the stent help to prevent another heart attack?

Give **one** way.

- (ii) **Figure 3** shows a surgeon putting a stent into a patient.

Figure 3



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The surgeon puts the stent into an artery in the leg. He moves the stent through the artery to the coronary artery.

Suggest **two** possible risks of this operation.

1. _____

2. _____

(2)

(Total 10 marks)