

2001 HIGHER SCHOOL CERTIFICATE EXAMINATION

Biology

Section I (continued)

Part B – 60 marks

Attempt Questions 16–28

Allow about 1 hour and 45 minutes for this part

Answer the questions in the spaces provided.

Marks

Question 16 (4 marks)

Genetically modified food on menu

Australians are growing more accepting of genetically modified (GM) food, a federal agency survey has found.

This survey found that 44 per cent of Australians now believe GM food would become more widely accepted and less risky in the next few years.

An earlier survey revealed that people thought the risks outweighed the benefits, but that the situation would change.

- (a) State ONE opinion held by Australians about genetically modified food, according to this article. 1

One opinion held by Australians about genetically modified food is that it will become less risky in a few years time.

- (b) Justify ONE piece of information you would need in order to determine the validity of the survey results. 3

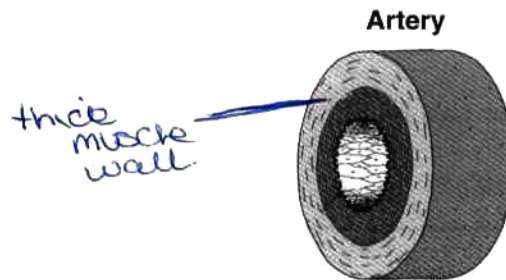
In order to determine the validity of the results, you would need to know how many people were interviewed as well as from what age group they were from, as people from different generations may have different beliefs due to religious upbringing, etc.

Marks

Question 17 (3 marks)

- (a) Label, on the diagram, ONE structural feature of the artery shown.

1



- (b) How does the labelled feature relate to the artery's function?

2

The thick muscle wall of artery helps to pump blood around the body, distributing blood to organs and muscles. It constricts and relaxes, making a pumping movement. This helps blood flow.

Question 18 (5 marks)

- (a) Name TWO products extracted from donated blood, and state their uses.

4

*Haemoglobin - given to people with a low oxygen carrying capacity. Improves amount of oxygen that reaches working cells. * Plasma - used in burns victims.

- (b) Propose ONE reason why scientists have now begun to develop artificial blood.

1

~~Not many people donate~~ There is an increasing number of diseases. Developed so these diseases won't have risk of being spread.