

Blood: practice questions

7 questions · 19 marks · mark scheme at the back

For Cambridge IGCSE Biology 0610 (and 0970, which has the same content). **Supplement** is Extended content, only examined on Papers 2 and 4.

Name

Total / 19

1 Which component of blood transports urea? [1 mark]

- A. ☐ Red blood cells
- B. ☐ Platelets
- C. ☐ Plasma
- D. ☐ White blood cells

2 List the four components of blood. [2 marks]

3 Describe two features that help you to identify a red blood cell in a photomicrograph. [2 marks]

4 State the function of (a) red blood cells, including the role of haemoglobin, (b) white blood cells, (c) plasma. [4 marks]

5 State two roles of blood clotting. [2 marks]

6

Supplement

[4 marks]

Describe the process of blood clotting.

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7

Supplement

[4 marks]

A photomicrograph shows two types of white blood cell. One has a large round nucleus filling most of the cell. The other has a lobed nucleus. Name each type and state its function.

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Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [1]

C C (1) Plasma transports urea

2. [2]

- red blood cells, white blood cells (1)
- platelets, plasma (1)

3. [2]

- no nucleus (1)
- small / round / pale in the middle / more numerous (1)
- allow biconcave shape

4. [4]

- (a) transport oxygen (1)
- haemoglobin combines with oxygen (1)
- (b) phagocytosis and antibody production (1)
- (c) transports blood cells / ions / nutrients / urea / hormones / carbon dioxide (1)

5. [2]

- prevents blood loss (1)
- prevents entry of pathogens (1)

6. [4] **Supplement**

- fibrinogen is a soluble protein in plasma (1)
- fibrinogen is converted to fibrin (1)
- fibrin is insoluble / forms fibres (1)
- fibres form a mesh that traps red blood cells to form a clot (1)

7. [4] **Supplement**

- large round nucleus = lymphocyte (1)
- produces antibodies (1)
- lobed nucleus = phagocyte (1)
- engulfs pathogens / phagocytosis (1)