

11.1 The Immune System

Question Paper

Course	CIE A Level Biology (9700) exams from 2022
Section	11. Immunity
Topic	11.1 The Immune System
Difficulty	Easy

Time allowed: 10

Score: /10

Percentage: /100

Question 1

Which of the following statements describes the function of a macrophage?

- A** They circulate in the blood and produce antigens in response to infection.
- B** They are found in tissues and secrete cytokines in response to infection.
- C** They can leave the blood and secrete cytotoxins when exposed to damaged cells.
- D** They can leave the blood and accumulate at sites of inflammation.

[1 mark]

Question 2

In the immune response, which cells become memory cells?

- 1 phagocytes
- 2 T-lymphocytes
- 3 B-lymphocytes

- A** 1, 2 and 3 **B** 1 and 2 only **C** 2 and 3 **D** 1 only

[1 mark]

Question 3

When a B-lymphocyte is activated by an antigen what action is taken?

- A** It engulfs the infected body cell which displays a complementary antigen.
- B** It secretes cytokines which stimulate T-lymphocytes to produce plasma cells.
- C** It divides repeatedly to form clones of genetically identical plasma cells.
- D** It attaches to the infected cell displaying the antigen and destroys it.

[1 mark]

Question 4

What type of white blood cell is involved in the cell-mediated response?

- A B-lymphocytes
- B phagocytes
- C T-lymphocytes
- D pathogens

[1 mark]

Question 5

Which of the following happens when people are injected with dead bacteria?

- A B-lymphocytes produce antigens
- B B-lymphocytes produce antibodies
- C T-lymphocytes produce antigens
- D T-lymphocytes produce antibodies

[1 mark]

Question 6

Which of the following statements would be a correct definition of an antigen?

- A** Non-self macromolecules that trigger an immune response.
- B** Non-self macromolecules found only on bacteria that trigger the formation of antibodies.
- C** Proteins that consist of two light and two heavy polypeptide chains.
- D** Self macromolecules embedded in B-lymphocytes cell membranes.

[1 mark]

Question 7

Which type of molecules are most important to identify a cell as non-self?

- A** proteins
- B** phospholipids
- C** carbohydrates
- D** nucleic acids

[1 mark]

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Question 8

When in a dusty environment a person inhales tiny minute particles.

What will be the correct effect on both B-lymphocytes and goblet cells?

	B-lymphocytes	goblet cells
A	less active	more active
B	more active	more active
C	less active	less active
D	more active	less active

[1 mark]

Question 9

Monocytes are formed when stem cells divide and specialise in the bone marrow.

Where in the body do these cells form macrophages?

- A** lymph nodes
- B** blood plasma
- C** bone marrow
- D** tissue fluid

[1 mark]

Question 10

T-killer cells can target and destroy body cells.

What process do they use to do this?

- A phagocytosis
- B by secreting antibodies
- C by releasing anti toxins
- D through punching a hole in the target cell membrane

[1 mark]

