

11.2 Antibodies & Vaccination

Question Paper

Course	CIEA Level Biology
Section	11. Immunity
Topic	11.2 Antibodies & Vaccination
Difficulty	Easy

Time allowed: 20
Score: /10
Percentage: /100

Question 1

During a pandemic of a very infectious disease, immediate protection would be needed for vulnerable people.

Which type of immunity would be given to these people?

	artificial	natural
passive	A	B
active	C	D

[1 mark]

Question 2

Specific antibodies are produced in response to a vaccination.

Which type of immunity would this be?

	artificial	natural
passive	A	B
active	C	D

[1 mark]

Question 3

When a baby ingests the mother's milk they take in antibodies.

Which type of immunity would this be?

	artificial	natural
passive	A	B
active	C	D

[1 mark]

Question 4

Which of the following is a description of natural passive immunity?

- A. Stimulation of lymphocytes by antigens contained in a vaccine.
- B. Stimulation of lymphocytes by antigens on the surface of invading pathogens.
- C. Protection against a pathogen by drinking colostrum containing antibodies.
- D. Protection against a pathogen by an injection of antibodies.

[1 mark]

Question 5

The statements below all describe possible developments in vaccine production.

Which one of them would be the most important in the fight against measles in developing countries?

- A. A vaccine produced by genetic engineering techniques.
- B. A vaccine containing only the live measles virus.
- C. A single vaccine without the need for boosters.
- D. A combined vaccine to combat it and other diseases.

[1 mark]

Question 6

Antibodies can protect the body from pathogens in several ways.

Which will not happen following antigen-antibody binding?

- A. increased susceptibility to phagocytosis
- B. neutralisation of toxins to make them harmless
- C. secretion of histamine to produce an allergic reaction
- D. agglutination of bacteria to reduce their spread

[1 mark]

Question 7

A vaccine may contain dead bacteria.

What type of immune response would this produce?

	artificial	passive
A	yes	yes
B	no	no
C	yes	no
D	no	yes

[1 mark]

Question 8

Natural passive immunity in newborn babies is only temporary.

What is the reason for this?

- A. the immunity is not inherited
- B. the antibodies only act in the mother
- C. the antibodies are insufficient in number
- D. no memory cells are produced in the baby

[1 mark]

Question 9

A child is given a vaccine to a viral disease. A few months later she is in contact with the same virus.

What is the expected response to the second contact with the virus?

- A. increased number of T-lymphocytes
- B. large numbers of antibodies are released
- C. large numbers of antigens are released
- D. increased number of B-lymphocytes

[1 mark]

Question 10

Influenza is a disease that is still highly prevalent in many countries, with annual outbreaks.

Why has a vaccination program not been able to eradicate influenza?

- A. the pathogen exists in many strains which mutate
- B. the pathogen is airborne
- C. the pathogen is present in the mucus of the lungs
- D. the virus has a stage of its life cycle in other mammals

[1 mark]

