

AS Level Biology B
H022/01 Foundations of biology

Question Set 10

1 Allergens, such as pollen, are non-pathogenic but can trigger an immune response. This is known as an allergic reaction.

(a) Complete the passage below about an allergic reaction using the most appropriate words or phrases.

Exposure to an allergen triggers the production of IgE antibodies which bind to cells. The allergen molecules then bind to the variable region of the IgE antibodies causing a chemical called to be released from the cells by This chemical increases the permeability of resulting in the formation of excess tissue fluid that leads to swelling and irritation associated with an inflammatory response. [4]

(b) The symptoms of asthma can be triggered by allergens.

The table below shows information about two types of drug that are used in inhalers to treat the symptoms of asthma.

Complete the table by inserting a tick (✓) or a cross (✗) as appropriate for each drug.

Drug	Reduce inflammation of the bronchi	Widen the lumen of the bronchi	Can be used during an acute asthma attack
Corticosteroids			
Beta-agonists			

[2]

Total Marks for Question Set 10: 6



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