



CLASS : 7

Subject: Biology

Topic: Answers to worksheets 10, 11, 12

Dated 15/06/2020, 17/06/2020, 19/06/2020

Answers to Worksheet No. :10

Date: -15/06/2020

Q1) Give one word answer:-

1. Allergen
2. Immunoglobulin
3. Allergic reaction
4. Emergency Anaphylaxis kit
5. Anaphylaxis

Q2) Answer the following questions:-

1. Five most common allergens are dust, smoke, eggs, shelled fish and fur of dog
2. Anaphylaxis is a severe life-threatening allergic reaction which requires immediate medical treatment including an anti -allergy injection. If it is not treated properly anaphylaxis can be fatal.
3. The most common symptoms of anaphylaxis are as follows:-
 - Itching and hives all over the body
 - Soreness of throat.
 - Nausea, vomiting or diarrhoea
 - Sudden drop in blood pressure
 - Abnormal heart rate.

4. If a person suffers from anaphylactic shock he should be given an anti allergy injection containing epinephrine. Once this drug is injected into the body of the person, it stimulates the adrenal gland to increase the heart beat.
5. **The role of IgE in an allergic reaction**:- The IgE or Immunoglobulin E reacts against the allergens which enter the body. However each IgE is reaction specific that is it may be reactive against only one type of pollen but not another. When a person is exposed to an allergen the body starts producing a huge quantity of IgE antibodies. The next exposure to the same allergen may result in an allergic reaction.

Answers to Worksheet No. :11

Date: -17/06/2020

Q1) Answer the following questions:-

1. The two main types of allergy are **Seasonal allergy** and **Perennial allergy**.
2. An inexpensive way to avoid allergen will be to take precautions against the allergens and avoiding types of food to which the person is allergic to.
3. The precautions to be taken against allergy are:-
 - To avoid dust allergens such as the house dust must be kept free and clean.
 - Wear mask while going outdoors during seasonal allergic period.
 - Avoid playing with furry animals if one is allergic to fur.
 - Know the particular food items the person is allergic to and avoid them in every form.
 - Keep the anti –allergy pills when one is travelling or going out of the house.
4. The symptoms of wheat allergy are **hives, rashes, stomach ache, stuffy nose** etc
5. **Hygiene Hypothesis** :- This means that early exposure to particular microorganism protects against allergic disease by contributing to the development of the immune system. Whereas lack of exposure leads to defects in the establishment of the immune system.
6. **Merits of the local defence system**
 - It starts working instantaneously.
 - It is not dependent on previous exposure.
 - It is very effective against pathogens

Q2) Differentiate between the following:-

| Histamine | Antihistamine |
|---|--|
| 1. These are chemicals released by antibodies | 1. These are anti- allergy drugs. |
| 2. These are a type of protein which cause allergic reaction. | 2. Helps to neutralise allergic reactions. |

| Perennial allergy | Seasonal allergy |
|--|--|
| 1. This is a type of allergy which takes place any time of the year. | 1. This type of allergy takes place at certain time of the year. |
| 2. Food allergy is a type of perennial allergy | 2. Pollen allergy is a type of seasonal allergy |

| Dermatitis | Hives |
|---|---|
| 1. This is a scaly, itchy rash that often effects the face, hands and knees | 1. These are red, itchy raised areas of the skin. |
| 2. It may be caused due to skin infection, exposure to food, airborne or contact allergens. | 2. causes may be due to medication such as antibiotics, sun exposure, latex, or some food |

Answers to Worksheet No. :12

Date: -19/06/2020

Q1) Select the correct option:-

1. Non- communicable disease
2. At any time of the year
3. Histamines
4. Physical defence system
5. Air- borne- borne allergens
6. Perennial allergy
7. At any age

Q2) Fill in the blanks with correct option:-

1. Respiratory
2. Same
3. Allergen
4. Hive
5. Seasonal
6. Highly specific
7. Abnormal heart rate

Q3) Define the following terms:-

- **Allergy:-** It is a body reaction that occurs in an individual who is hypersensitive to certain substances that may be fairly harmless for the body in general. Allergies can affect anyone regardless of age, gender or socioeconomic status.
- **Allergen:-** The substances that trigger an allergic response are called allergens. Some examples of allergens are stress, smoke, certain medicines, perfumes or environmental irritants such as pollen grains, house dust and so on.
- **Anaphylaxis:-** This is a very severe life- threatening allergic reaction which requires immediate medical treatment. If not treated on time anaphylaxis could be fatal.