

Test 1

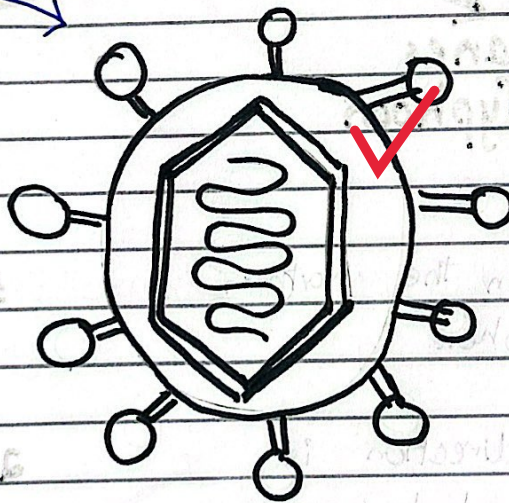
Q1. Vaccine and Antibiotics:

Vaccines are used against viruses and antibiotics are used to counter the effect of bacterial organisms. This is the key difference between them. Collectively, vaccines and antibiotics are used to cure diseases.

Vaccine

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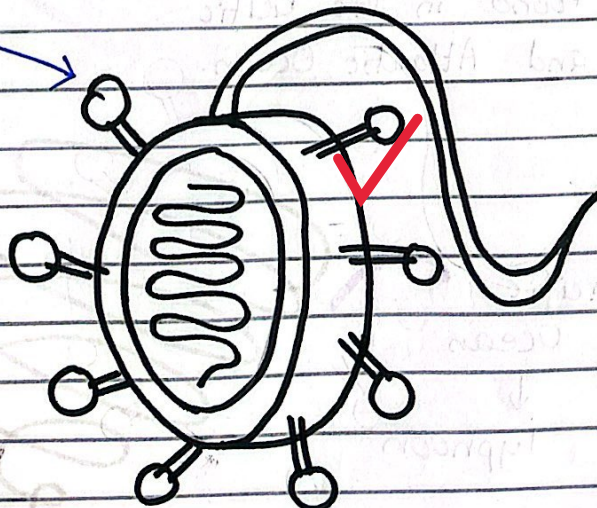
- Vaccine
- ↓
- Attaches itself to the virus
  - Counters the effects of the virus



Virus

Antibiotics

- Bacteria
- ↓
- Attaches itself to the bacteria
  - Counters the effect of the bacteria



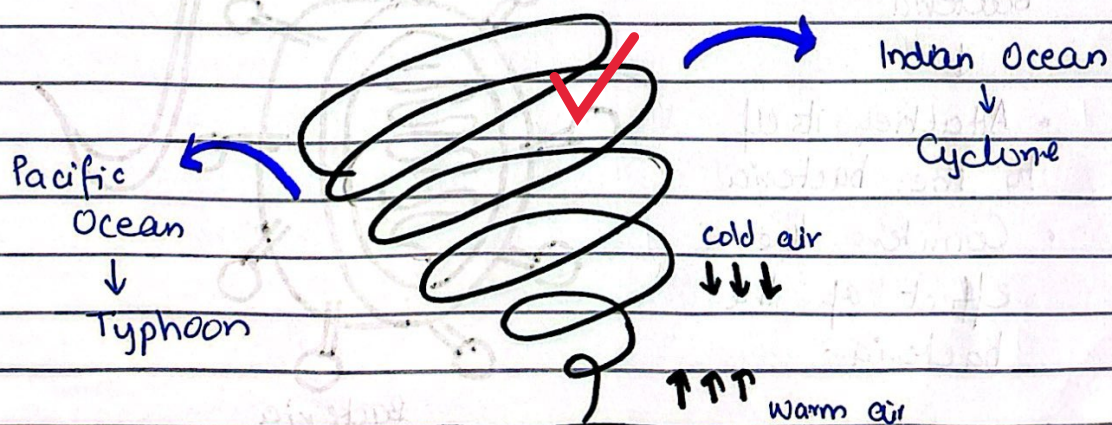
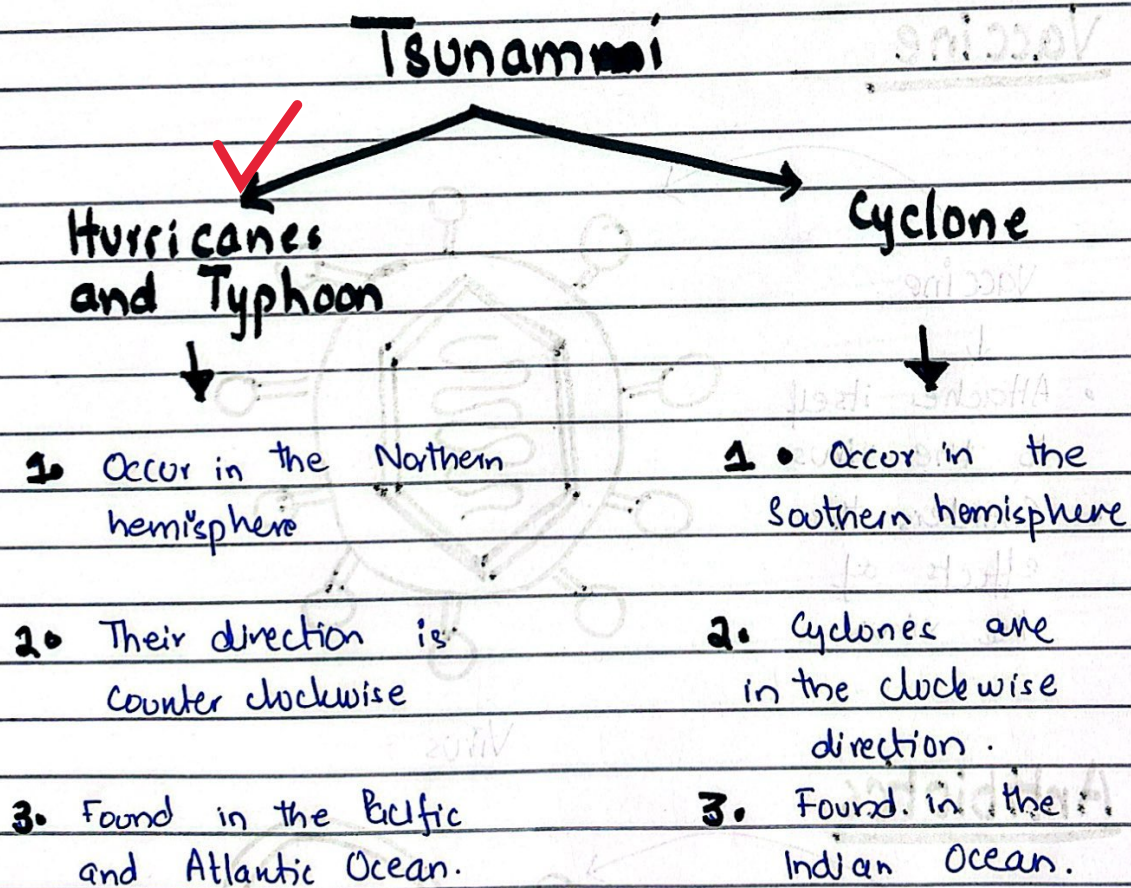
Bacteria



## B. Cyclones, Tsunami and Typhoons:

Cyclones are the type of tsunami that occur in the southern hemisphere. Typhoons and hurricanes, however, are a type of tsunami that occur in the Northern hemisphere. Their main difference lies in their location and direction.

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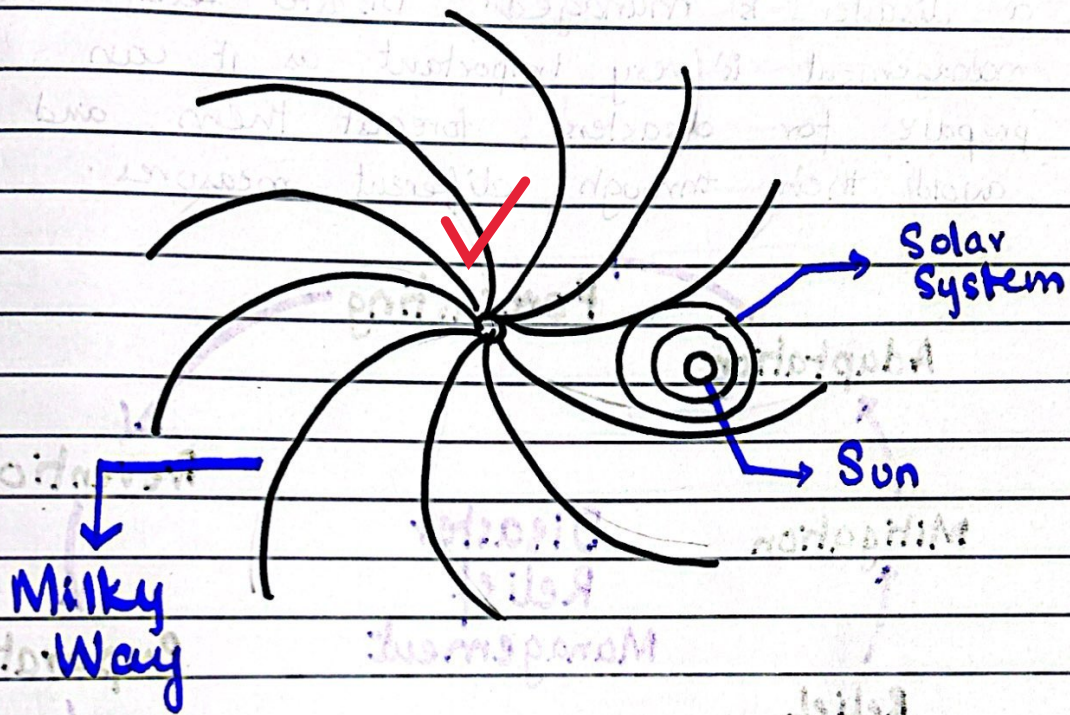




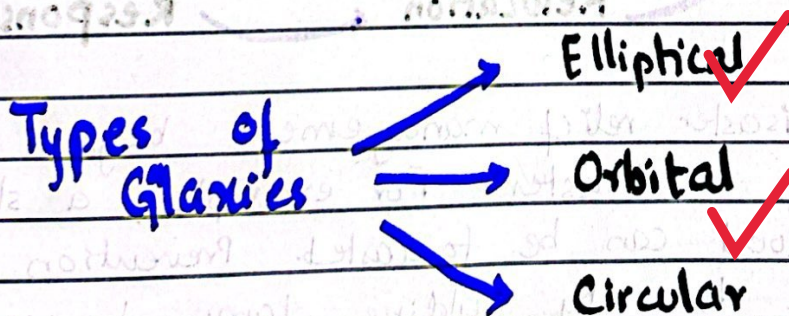
## C. Galaxy:

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The universe contains galaxies and stars... Solar system is a part of our galaxy called milky way.



There are different types of galaxies divided according to their shapes.



Milky way is our galaxy that contains the solar system and different stars.

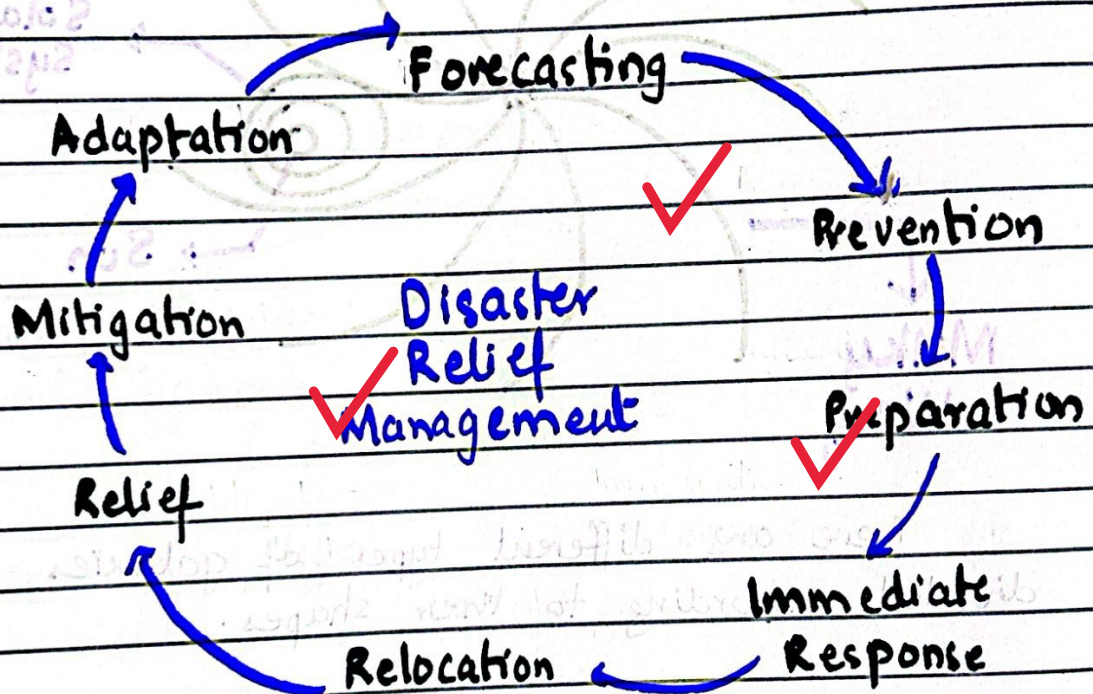
Big bang theory created sub-atomic particles, then atoms and then 380 m years later, galaxies and stars.



## D. DRM

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DRM also known as **Disaster Relief Management** is the process through which a disaster is managed. Disaster relief management is very important as it can prepare for disasters, forecast them and avoid them through different measures.



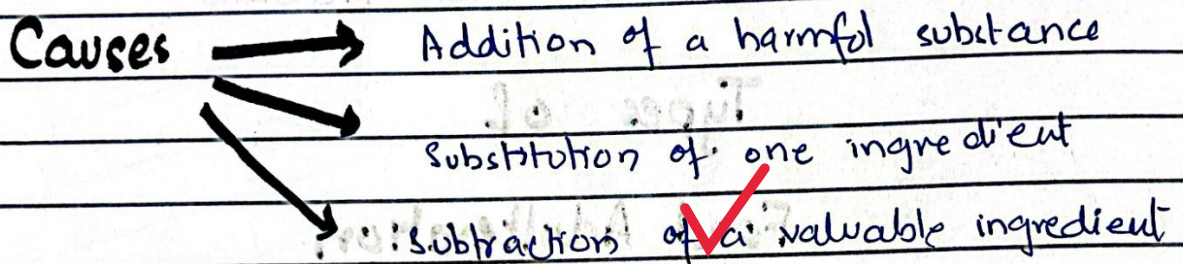
The disaster relief management begins with forecasting a disaster. For example, a slow on-set flood can be forecasted. Prevention for it can be done by building dams. In case the disaster cannot be prevented, the authorities prepare for it to minimize damage. The immediate response is important as it provides aid and healthcare to victims. The displaced people are then relocated and relief is provided. The authorities then come up with measures to mitigate disasters and adapt with new realities.



## Q2. C. Food Adulteration

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Food adulteration is the deterioration of food quality due to the addition of a harmful substance or an abstraction of a valuable ingredient.



### Types of Food Adulteration

#### Intentional

When someone intentionally adds a substance

e.g. A coloring agent

#### Incidental

When food is contaminated

e.g. Pesticides, Rodents

#### Metallic Contamination

When metals come into contact

e.g. Lead, Arsenic

### Effects of Food Adulteration:

Food adulteration can make a food inedible, it can deteriorate the quality, the appearance or the texture of the food item.

### Solution:

The solution is to keep food in safe



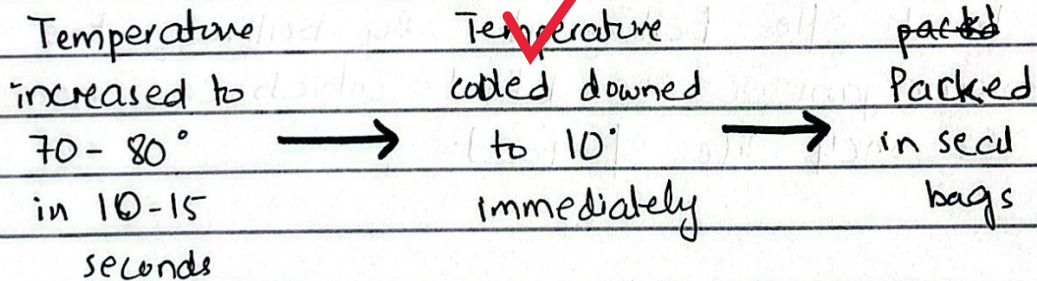
places to avoid contamination. Authorities should keep a check on intentional adulteration which can be done to change appearance of food.

## D. Food Preservation Methods

Different traditional and industrial methods are used to preserve food. Preservation of food is done to increase the shelf-life of the food item.

### 1. Pasteurization

Pasteurization is an industrial method used to preserve liquid foods, specifically milk.



In this method the temperature is first increased and then decreased. This helps increase the shelf life.

### 2. Pickling

Pickling is a method used to preserve fruits and vegetables like lemon, mangoes, peppers and carrots. Pickling uses vinegar to preserve the vegetables for a long time.



### 3. Freezing

Freezing can help preserve food for a long period of time. In current times, it is a method widely used to freeze cooked items and vegetables which can be reheated and consumed.

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### 4. Drying

Drying fruits is a common practice used to preserve fruits such as almonds and cashew nuts. In this method, food is dried directly in the sun for a long time.

### 5. Boiling

Boiling is a traditional food preservation method where a food can be stored after boiling it. By boiling, the microorganisms are killed which can increase the shelf life of food.