

Q#1:

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(a)

Food Adulteration

Food Contamination

→ Adding such kind of substances that can increase the quantity of food, is known as food adulteration.

Food contamination is the process in which food becomes harmful for the consumer.

→ This is done for maximization of profit.

→ Grinding harmful substance with wheat.

→ Adding water into milk.

→ Reuse of cooking oil.

→ Adding bad parts of meat in fast food (Shawarma).

→ Pesticides in rice.

Controlling measures of food adulteration:

1) Strict policies of food authorities.

2) Regular raids by authorities.

3) Heavy fine imposition, if found guilty.

4) Quarterly laboratory reports submission to concerned departments.

5) Renewal of NOC, yearly by the business from food authority.

12.5

b)

Methods of preservation of food:

1) Air tight packing of food that can preserve food from direct contact to atmosphere.

Ex: Ready to ~~eat~~ meals in cans. can have shelf life of upto a year.

2) Dry down the food, in this process all the water present in it ~~removes~~ which enhances lifespan of the product.

Ex: Dried fruits, apples, mangos, apricots, peach etc are dried and packed.

3) Salting is another process in which the life of food is increase.

Ex: Salting in fish industry is core for the business, fish meat gets rotten in few days but salting maximize its shelflife.

4) Freezing can also enhance the shelf life of food.

Ex: Meat, fruits and other vegetables are frozen in transportation to increase their lifespan.

c)

Temperature:

Temperature can be explained through heat and cold. Temperature can be external or internal. Its measuring units are Celsius, Fahrenheit.

Ex: Global warming is the concept of temperature increased in atmosphere from average. Or, having fever in human is increase of internal temperature.

Pressure:

Pressure is also known as atmospheric force that is exerted on some point or area. The air present in atmosphere have some quantity of pressure on the surface. Its measuring units is pascal.

Ex: Pressure of air in vehicle tyre, pressure cooker.

Humidity:

3 Presence of water molecules in the atmosphere is called humidity. It is always higher on coastal cities due to the sea. Water vaporize or evaporates from its surface and in small molecules rises in air.

Ex: Human body gets more sweaty in high humid areas.

d)

Earthquake:

The movement or vibration of earth is called earthquake. It is recognized as natural disaster, because of its unpredictability. Earth consists of land mass which is balanced on tectonic plates present deep inside its core and also the mountain ranges play a pivotal role in balancing it.

Why earthquake happens:

These plates are stacked one over the other deep inside the earth. When one plate slides from its place due to any reason; it can be erosion or softening due to humidity - they cause a movement which can be felt on the surface of the earth.

Earthquake Regions:

Earthquake can come at any place of earth, but some specific locations of the earth are directly on the stacked tectonic plates of the earth. Japan is the example because the quantity of earthquakes are in hundreds in its region.

Q#2:

a)

Renewable Energy Resources:

- 1) Solar Energy
- 2) Wind turbines
- 3) Water energy (Dams)
- 4) Tidal energy
- 5) Biofuels.

These all are renewable energy resources from where energy can be generated continuously without causing any harm to the nature and atmosphere. As world is facing issues of air pollution, global warming and rise in numbers of natural disasters due to the contribution of fossil fuel burning. These methods can be remedial effect for the environment.

Solar Energy: Utilization of the heat and light coming from the sun through the help of solar plates is called solar energy. It is the most important ~~and~~ renewable energy medium as it is contributing the most and it is inexpensive as compared to other mediums.

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b)

Rocks:

Rocks are the solid, heavy, and condensed form of minerals available on the earth. Rocks are hard in physical form and a common element of the earth. It is available in form of mountains on the earth's surface.

Types of Rocks:

Rocks types are classified from the minerals available in it. Salt rocks are made up of salt, graphite rocks are made up of graphite same goes with every mineral.

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c)

Saturated fats

↳ It is a type of fat that generates energy in human body.

↳ This can be taken in form of meat and oil, ghee and butter.

↳ This can lead to be dangerous if in excess.

Unsaturated fats

↳ This fat also provides energy to the human body.

↳ This fat is also known as good fats.

↳ Its sources can be vegetables, fruits and dairy.

Importance:

Saturated fat is majorly important for providing energy to human body. The body stays healthy if there is no excess saturated fat in it.

Unsaturated fat is present in our body in limited quantity, it provides protection to our organs and better working of brain and body is dependent on unsaturated fats.

a)

Water soluble vitamins:

There are some water soluble vitamins.

- Vitamin B_{2,3} and 6
- Vitamin C
- Vitamin H

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Vitamin B:

Vitamin (B) are mostly in the working of absorbing energy from food for the body.

Vitamin C:

Vitamin (C) are mostly used for the betterment of skin and immune system. Most commonly found in citrusy fruits.

Vitamin H:

Vitamin (H) also known as biotin which mostly for the hair and nails.