

16-Aug

Qa What are the characteristics of a tropical cyclone? Describe the formation process and the factors that influences its intensity. How do the costal communities impact?

## TROPICAL CYCLONES:

Tropical cyclones are also called 'warm water cyclones'. The tropical cyclones are formed in the warm oceans, around the temperature of  $27^{\circ}\text{C}$ . This type of cyclone ~~gets~~ formed due to ~~warm~~ high temperature of water and evaporation.  
~~The factor~~

## FORMATION OF TROPICAL CYCLONES:

The factors that are involved in the formation of tropical cyclone are: temperature, air pressure and earth's rotation.

When the temperature of water rises, the water droplets suspends into the air through the proesse process of



evaporation. This creates the ~~water~~ low air pressure of the water surface of the ocean.

The low ~~air~~ pressure at the water surface creates the ~~vacuum~~ for the ~~air~~ surrounded. This air in low pressure environment creates cyclone.

Further, the earth's rotation contribute to corollis effect to the cyclone. And, the air evaporated, cools down creating ~~heavy storm~~ and ~~rainfall~~.

The tropical cyclone has an eye in the center (where pressure is low) and wind surrounded in ~~eye~~ circle.

## IMPACT OF TROPICAL CYCLONE:

- Unexpected weather conditions: The



formation of tropical cyclone in the ocean abruptly the weather pattern at the coastal areas around it.

- Heavy rainfall and storm. This also cause heavy rainfall and storm weather.

- Loss and damage of property: At the coastal areas; the tropical cyclone's strong winds and storm damages the property and infrastructure of the effected area.

Qb) What are biofuels and how they are produced? Discuss the advantages and disadvantages of using biofuels. How can biofuels contribute to reducing greenhouse gas emissions?

## BIOFUELS:

The process of making fuel by using organic matter is called



biofuel. The word "bio" means life and "fuel" means energy. Thus, the energy that is produced by living organism is "biofuel".

## PRODUCTION OF BIOFUELS:

Biofuels are produced by plants and waste material of animals. The plant include wood, algae etc, and the waste material include - the dung of animal. It is mainly utilized by burning process.

## ADVANTAGE OF BIOFUEL:

1. It is a renewable source of energy.
2. The waste material can easily be utilized without leaving any further waste.
3. The contribution to air pollution is less as compared to other energy resources or fuels.



## DISADVANTAGES OF BIOPUELS:

1. It ~~may~~ led to cutting of plants that are crucial for the sustainability of the environment.
2. It is ~~already~~ in minimal quantity of source.
3. The burning process contributes to air pollution.

## EFFECT ON GREENHOUSE GASES:

The biofuels has <sup>much</sup> lesser contribution to greenhouse gases as compared to other energy sources. The burning of plant and animal waste can emit  $\text{CO}_2$  into the environment. However, certain scientific methods ~~extract~~ the fuel without the burning process. This phenomenon will reduce the emission which utilizing biofuels.

Q) What are different types of vitamin and how do they contribute to human health? Discuss the importance of vitamins in maintaining healthy skin hair and eyes and describe the consequences of vitamin deficiencies?



# VITAMINS:

Vitamins are one of the micronutrients essential for a balance diet. Vitamins are important for the body to function properly. Its excessiveness and deficiency may lead to certain health issues.

## TYPES AND ITS CONTRIBUTION:

Vitamins are classified into two types - fat/lipids soluble and water solution. The excessive vitamins of fat soluble can lead to health issues. Whereas, the excess intake of water soluble vitamins are excreted from the body.

Certain vitamins are important for the skin and eyes, hair and eyes health - such as, vitamin A, B and C.

## VITAMINS AND ITS DEFICIENCY:



Vitamin A Effect on skin and eyes

Vitamin B Effect on skin, bones and hair health.

Vitamin C It may cause scurvy and blood quality decline

Vitamin D Rickets - bones health

Vitamin E Skin health

Vitamin K Blood clotting delay.

discuss the last part of the answer separately/

Qd What is polio? How is it transmitted?  
Discuss the global efforts to eradicate polio and the challenges faced in achieving this goal. Describe the importance of vaccination in preventing polio.

**POLIO :**

Polio is a contagious disease that using effect the children under the



age of 5. Polio virus effect the nervous system, paralyzing the limbs or half of the body.

## TRANSMISSION OF POLIO VIRUS:

Polio virus can be transmitted through poor hygien and non-synetized restrooms. It can also be transferred from the ~~toe~~ effected person.

## GLOBAL EFFORT:

Polio virus was an pandemic in 1988, but in early 2000s, the virus was eradicated through vaccine. Polio vaccine is free of cost throughout the world to combat the virus.

## CHALLENGES :

The challenges are mainly in two countries - Pakistan and Afghanistan. ~~There~~ is still polio virus prevails in these countries due to



improper vaccination. People deny to vaccinate their children and this result in polio virus spread.

## IMPORTANCE :

It is important to eradicate polio virus as it is a threat to other's health. It has already been eradicated from the whole world. Pakistan has to take strict measures in this regard.

good answers overall!!!!

the length of the answer is fine!