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WELCOME TO VIRTUAL CLASS STD VII

SUBJECT : GEOGRAPHY
CHAPTER NUMBER: 8
CHAPTER NAME : THE HYDROSPHERE

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Give reasons:-

- Through water covers 71% of the Earth, very little can be used by humans

Ans- Though water covers 71% of the Earth, making it a Blue Planet, 97% of the Earth's water is found in the ocean and it is salty. Two per cent of the water is found in the form of glaciers and ice sheets. Only 1% of the fresh water is found in liquid form on the surface of the Earth and as underground streams.

- The ocean are becoming saltier

Ans:- Ocean water is saline in nature because of rivers and underground streams, which carry dissolved salt with them , empty into the oceans. The salt that come from volcanic eruption in the mid –ocean ridges also contribute. With global warning adding to the rate of evaporation , the oceans are becoming saltier by the day.

- Winds are the most common factor for formation of waves

Ans:- Winds play A major role in the formation of waves. The top layer of water body is so light and has A less density. The force of air pulls the top surface and which results in the formation of waves.

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- Convergence zone of hot and cold current are busy though they are dangerous area.

Answer:- Ocean currents are streams of water flowing constantly on the ocean surface in definite directions. The ocean currents may be warm or cold. The warm ocean currents originate near the equator and move towards the poles. The cold current carry water from polar or higher latitudes to tropical or lower latitudes. For example the Labrador Ocean current is a cold current while the Gulf Stream is a warm current. The ocean current influence the temperature conditions of the area. Warm currents bring about warm temperatures over land surface. The areas where the warm current and cold currents meet provide the best fishing grounds of the world. For example seas around Japan and the eastern coast of North America. The areas where a warm and cold current meet also experience foggy weather and therefore navigation becomes difficult.

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Long question:-

Q1- Explain how evaporation, condensation and precipitation essential for water cycle.

Ans:- Water is continuously moving from the earth's surface into the atmosphere and back again to the earth's surface.

1. Water from the different water bodies reaches the atmosphere through evaporation in the form of water vapour.
2. Due to the loss of heat in the atmosphere, the process of condensation takes place. Thus, water vapour is converted back into water drops.
3. This leads to the precipitation in the form of rain, snow or sleet.
4. Water that falls on the land in the form of rain collects in ponds or flows as streams or rivers.
5. This never-ending movement of water is called hydrological cycle or water cycle. Thus, the water cycle has no beginning or end.

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Q2- Explain the term Swash and Back wash.

Ans:- When a wave breaks, water is washed up the beach. This is called the **swash** . Then the water runs back down the beach, which is called the **backwash.**

Q3:- With the help of diagrams, show how the gravitational pull of the Sun and the moon affect the tide.

Ans:-Tides based on the Sun, Moon and the Earth Positions The height of rising water (high tide) varies appreciably depending upon the position of sun and moon with respect to the earth.

- Spring tides and neap tides come under this category.

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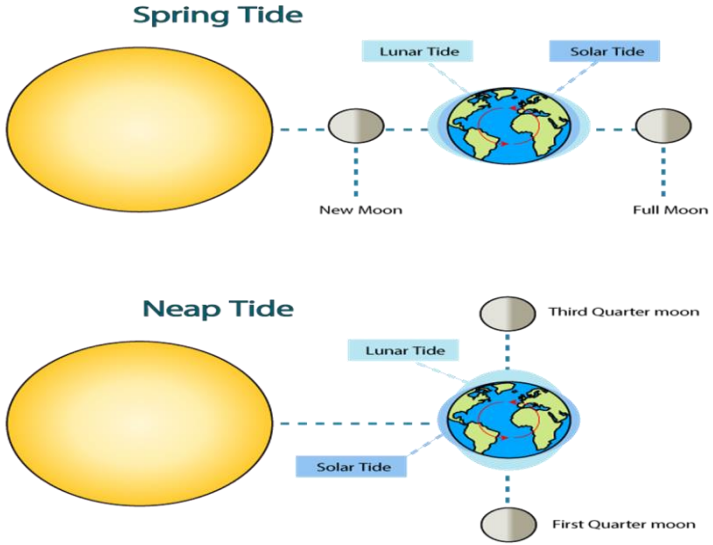
Spring tides: The position of both the sun and the moon in relation to the earth has direct bearing on tide height. When the sun, the moon and the earth are in a straight line, the height of the tide will be higher. These are called spring tides and they occur twice a month, one on full moon period and another during new moon period.

Neap tides:

Normally, there is a seven-day interval between the spring tides and neap tides. At this time the sun and moon are at right angles to each other and the forces of the sun and moon tend to counteract one another. The Moon's attraction, though more than twice as strong as the sun's, is diminished by the counteracting force of the sun's gravitational pull.



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Q4:- How do ocean currents influence coastal areas?

Ans:- Ocean currents influence the climate and economic activities of coastal regions in the following ways:

1. Warm currents raise the temperature along the coast, while cold currents drop the temperature along the coast. The ports of Norway remain ice-free even in winters because of the effect of warm currents, while the coast of Newfoundland remains frozen for almost nine months owing to the cold currents.
2. Winds blowing over warm currents result in a good amount of rainfall, as they get moisture-laden. On the other hand, winds blowing over cold currents are dry; therefore, rainfall is scanty. The west coast of Europe receives a significant amount of rainfall because of the warm North Atlantic Drift, while the Atacama Desert of South America is the result of the influence of the cold Peru Current.
3. Ocean currents also help in navigation and transport. A lot of fuel and time are saved if ships move along the direction of currents.
4. The mixing of warm and cold currents causes dense fog and reduced visibility. For example, Newfoundland, where the warm Gulf Stream and the cold Labrador Current meet, is densely foggy, posing a great risk of accidents.
5. The places where cold and warm currents meet are the biggest fishing grounds in the world. Small organisms known as phytoplanktons thrive in these places; they also make an excellent food for the fish.

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Q5. What causes water pollution? Why is it a problem?

Ans:- Water pollution can be defined as the contamination of water bodies. Water pollution is caused when water bodies such as rivers, lakes, oceans, groundwater, and aquifers get contaminated with industrial and agricultural effluents.

The key causatives of water pollution in India are:

- Urbanization.
- Deforestation.
- Industrial effluents.
- Social and Religious Practices.
- Use of Detergents and Fertilizers.
- Agricultural run-offs- Use of insecticides and pesticides.

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THANKING YOU

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