

PUBLIC SCHOOL DARBHANGA

SESSION (2020-21) SUBJECT– ENGLISH CLASS VII

Read the following passage and answer the questions that follow:

1. Both water and energy arc integral parts of the human body. By weight, about 60% of an adult's human body is water and dehydration is one of the biggest single killers of children in the modern world. Life without water is unthinkable.

2. The human body needs its daily intake of food to meet its energy requirements, which according to the Food and Agriculture Organisation of the United Nations is about 1,800 kcal per day. Life without energy is equally unthinkable.

3. The energy that we take in through food again depends, amongst other things, on water for agriculture and often that water is pumped with electrical or other forms of energy. The interdependence of energy and water is evident.

4. The world at large seeks both water and energy security. The World watch Institute estimates that about 1.1 billion people (one-fifth of the world population) live in areas of physical water scarcity and another 1.6 billion are facing economic water shortage (when existing water sources cannot be used because of a lack of investment in water-related infrastructure). We will probably have a world population of 9 billion by 2050 and this will put further stress on the water sourcing and supply systems. Here again the connection between energy and water is evident: globally about 70% of water consumption is for the agricultural sector. No water, no food, no energy.

5. Actions needed on the water front include reduction in water usage for agriculture (pump efficiencies, drip irrigation instead of flood irrigation, change in crop patterns), recycling of water, extensive rainwater harvesting programmes, stoppage of run-offs and water pollution.

6. We need to remind ourselves that the fossil-based energy that we rely on so much for almost everything we do is stored solar energy. And while the sun took over 150 million years to store its energy in the form of fossil fuels, we are busy discharging that huge solar battery in a matter of a few hundred years.

Now answer the following questions:

- a. How do most of the children die in today's age and time?
- b. Why is life without energy unthinkable?
- c. How are energy and water dependent on each other?
- d. What is the difference between physical water scarcity and economic water shortage?
- e. What is likely to happen by 2050?
- f. Mention any two steps that can be taken to conserve water.
- g. What does 'fossil fuel' refer to?
- h. 'Busy discharging that huge solar battery'. What does it mean?

SELF CHECK

- a. Dehydration is one of the biggest single killers of children in the modern world. Life without water is unthinkable.
- b. The human body needs its daily intake of food to meet its energy requirements, which according to the Food and Agriculture Organisation of the United Nations is about 1,800 kcal per day. Life without energy is equally unthinkable.
- c. The energy that we take in through food again depends, amongst other things, on water for agriculture and often that water is pumped with electrical or other forms of energy. The interdependence of energy and water is evident.
- d. Physical water scarcity occurs when there is not enough water to meet demands of both- humans as well as the ecosystem. Economic water shortage is when existing water sources cannot be used because of a lack of investment in waterrelated infrastructure
- e. We will probably have a world population of 9 billion by 2050 and this will put further stress on the water sourcing and supply systems. Here again the connection between energy and water is evident: globally about 70% of water consumption is for the agricultural sector. No water, no food, no energy.
- f. recycling of water, extensive rainwater harvesting programmes, stoppage of runoffs and water pollution. (Any 2)
- g. a natural fuel such as coal or gas formed in the geological past from the remains of living organisms.
- h. Reckless use of natural resources such as Solar energy.