

### The Elixir of Life

### **Previous Year Questions: Solved**

### 1 Mark Questions

1. What are civilized forests? [June 2017]
Ans. : — Civilized forests are the systematic planting of suitable trees in every possible or even in impossible areas, distinguished from wild and untamed jungles.
2 .What is the "cheering sight" mentioned by Sir C. V. Raman? [Apr 2016] Ans.: — According to Sir C.V. Raman, the rainfed tanks that are so
common in South India are a cheering sight when they are full.
3. According to C.V. Raman the true elixir of life is A. soil B. rain-fed tank C. civilized forest D. plain water [Model QP 21-22] Ans. : D. plain water
4. The writer, C.V. Raman compares water in a landscape to A) human eyes B) beautiful girl C) sunshine D) human mood [2021] Ans. A) human eyes
2 mark questions
1. How is the water in a landscape described by the writer ? [Apr 2022]
Ans.: Water in a landscape is compared by the writer to the eyes in a human face. It reflects the mood of the hour, being bright and gay when sun shines, and turning to dark and gloomy when the sky is overcast.
2. How do geologists explain the formation of the Nile Valley? [Sep 2020]



Ans.: Geoglogists explain that the entire soil of the Nile Valley is the creation of the river itself. It was brought down as the finest silt in its flood waters, from the highlands of Abyssinia and remote Central Africa. It was laid down through the ages in the trough through which Nile flows into the sea.

.....

3. Mention any two advantages of civilized forests. [June 2019] Ans.: Civilized forests would directly and indirectly prove a source of untold wealth to the country. They would check soil erosion and conserve the rainfall of the country from flowing away to waste.

-----

## 4. What does the writer compare water in a landscape to? Why? [Jun 2018]

Ans.: Water in a landscape is compared by the writer to the eyes in a human face. He does so because like eyes, the water reflects the mood of the hour, being bright and gay when the sun shines, and turning to dark and gloomy when the sky is overcast.

.....

## 5. Why does Sir C. V. Raman say that Egypt, in fact, was made by its river? [Jun 2017]

Ans.: Sir C.V. Raman says that Egypt was made by its river because its ancient civilization was created and is sustained by the life-giving waters which come down year after year with unfailing regularity. The fertile soil of the Nile valley is made by the river Nile, which brought the finest silt from Central Africa.

-----

# 6. What are the subsidiary purposes served by controlling the movement of water and by its conservation? [Apr 2016]

Ans.: Controlling the movement of water and its conservation can serve subsidiary purposes like the development of internal waterways, which is the cheapest form of internal transport in a country. It also enables the development of hydroelectric power to improve the rural economy.

.....

## 7. What are civilized forests? What is their role in checking soil erosion? [Mar 2019]

Ans.: The systematic planting of suitable trees in every possible or even in impossible areas and their development can be called 'civilized forests'. These forests would directly or indirectly prove a



source of untold wealth to the country as they would check soil erosion and conserve the rainfall of the country from flowing away to waste.

3 marks questions

### 1. How does the water in the rain-fed tanks get its colour? [Jun 2022]

Ans.: The water in the rain-fed tanks gets its colour because water has the power to carry silt or finely-divided soil in suspension. That is one of the most remarkable facts about water. This colour varies with the nature of the earth in the catchment area and is most vivid immediately after a fresh inflow following rain. Swiftly flowing water can carry fairly large and heavy particles. The finest particles, however, remain floating within the liquid in spite of their greater density and are, of course, extremely small, but their number is also great.

.....

#### 2. How does soil erosion occur ? [Sep 2020]

Ans.: Soil erosion occurs in successive steps, the earliest of which may easily pass unnoticed. In the later stages, the cutting up and washing away of the earth can be seen in the formation of deep gullies and ravines. Sudden bursts of heavy rain are the principal factors in causing soil erosion. Other causes that contribute to soil erosion are the slope of the land, the removal of natural vegetation, the existence of ruts, and the absence of any checks that stop the flow of water.

.....

3. How do controlling the movement of water and its conservation serve the subsidiary purposes also? [Jun 2019]

Ans.: Controlling the movement of water and its conservation also serve subsidiary purposes of value to life in rural areas. Firstly, it can help in the development of internal waterways, which is by far the cheapest form of internal transport in the country. Secondly, the harvesting of water supplies usually also makes possible the development of hydroelectric power. This would help the rural economy, and also in tapping the underground water, thus creating an alternate supply of water.

.....

4. What does the writer say about the rain-fed tanks? [Jun 2018] or How does Sir C. V. Raman describe the rain-fed tanks? [Apr 2018] Ans.: The writer says that rain-fed tanks are very common in South India. Sadly, their maintenance is neglected. They are a cheering



sight when they are full. They are shallow, but that is less evident since the water is silt-laden. They play a vital role in South Indian agriculture. Some tanks are large and a beautiful sight to see the sunrise and sunset over them. They get their colour from the silt that they carry in suspension. The colour varies with the nature of the earth in the catchment areas. ( Any five points )

.....

5. How does Sir C. V. Raman show that water is the real elixir of life? [Apr 2017] or C. V. Raman says that water is the real elixir of life. Justify this statement giving examples. [Jun 2015]

Ans.: Sir C.V. Raman shows that water is the real elixir of life by showing how important it is to all life. Every animal and every plant contains water in its body. No physiological activity is possible in which water does not play an essential part. The moisture in the soil is essential for plants and trees. Agriculture depends on water as well. This common substance, which we take for granted, is the most potent thing on earth that shapes all life on our planet.

.....

6. What are the various causes of soil erosion? How can it be prevented? [Jun 2016]

Sudden bursts of heavy rain are the principal factors in causing soil erosion. Other causes that contribute to soil erosion are the slope of the land, the removal of natural vegetation, the existence of ruts, and the absence of any checks that stop the flow of water. Soil erosion can be prevented by terracing the land, constructing bunds to check the flow of water, the practice of contour cultivation and planting appropriate types of vegetation.

.....

7.The preservation and utilization of water is fundamental for human life. Explain. [Apr 2023]

Sir C.V. Raman shows that water is the real elixir of life by showing how important it is to all life, and especially human life. No physiological activity is possible in which water does not play an essential part. Agriculture depends on water as well. The preservation of water can be done by preventing soil erosion, systematic planting of civilized forests. Conservation can also help us utilize water for creating internal waterways and hydroelectric power.



#### Reference to Context Questions - 3 Marks

#### Egypt, in fact, was made by its river. [Mar 2019]

Ans.: The given statement is from 'The Elixir of Life' by C. V. Raman. The writer addresses these words to the readers. He mentions this when starts to talk about the important role of water. According to geologists, the entire soil of the Nile Valley is the creation of the river Nile. The flood waters from Abyssinia and Central Africa have brought down the finest silt to the valley. Egypt and its ancient civilisation were created and sustained by the river Nile.

.....

#### 4 marks

1. What are the three sources of water and how does it serve a subsidiary purpose? [Model QP 2022-23]

Ans.: The three sources of water are artesian water, rain and snowfall. Water can serve many subsidiary purposes. The measures necessary to control the movement of water and conserve its supply can also serve these subsidiary purposes of value to countryside life. Firstly, it can help in the development of internal waterways, which is by far the cheapest form of internal transport in the country. Secondly, the harvesting of water supplies usually also makes possible the development of hydroelectric power. This would help the rural economy, and also in tapping the underground water, thus creating an alternate supply of water.

.....

2. Mention the causes and prevention of soil erosion as described by C. V. Raman. [Apr 2022] or According to C. V. Raman what are the various causes of soil erosion? How can we prevent it? [Jun 2022] or What are the causes of soil erosion and what are the methods of prevention as suggested by Sir C. V. Raman? [June 2018] or How is the precious soil eroded and how can this be prevented? [April 2016]

Ans.: Soil erosion is a serious problem in many countries and especially in many parts of India. It is caused by sudden bursts of excessively heavy rain resulting in a large run-off of surplus water. Other causes of soil erosion are the slope of the land, removal of the natural protective coat of vegetation, the existence of ruts, and the absence of any checks to the flow of water.



The menace of soil erosion can cause many problems in successful agriculture. It needs our attention and preventive action. Soil erosion can be prevented by the terracing of the land, the construction of bunds to check the flow of water, the practice of contour cultivation and the planting of appropriate types of vegetation.

.....

3. What does C. V. Raman say about the beauty of the countryside and the rain-fed tanks? [July 2020] or What does C.V. Raman say about rain-fed tanks? [Model QP 21-22]

Ans.: C.V. Raman describes how water adds to the beauty of the countryside. A little stream trickling over the rocks or a little pond by the wayside where the cattle quench their thirst of an evening. Rainfed tanks are common in South India, but sadly often neglected. It is a cheering sight when they are full. They are shallow, water is silt-laden and throws the light back and the bottom does not show up. These tanks play a vital role in South Indian agriculture. They are large and a beautiful sight to see sunrise or sunset on them. He compares water in a landscape to eyes in a human face. It reflects the mood of the hour. The water in the rainfed tanks gets its colour from the soil it carries in suspension.

.....

### 4. 'Water is the basis of all life' — Elucidate. [June 2019]

Ans.: Sir C.V. Raman shows that water is the real elixir of life by showing how important it is to all life. Every animal and every plant contains water in its body. No physiological activity is possible in which water does not play an essential part. The moisture in the soil is essential for plants and trees. Agriculture depends on water as well. This common substance, which we take for granted, is the most potent thing on earth that shapes all life on our planet. For example, Egypt was made by its river, the Nile, as it brought the finest silt from Central Africa. In rural India, water can also serve subsidiary purposes such as production of hydro-electricity, and inland waterways.