

Question 2:

A) Give importance of Renewable
..... explain solar energy.

Importance of Renewable energy source:

Renewable energy sources are the energy sources that can be used again.

In contemporary world where environmental degradation has been the core issue, the

importance of renewable energy sources has increased. The most important aspect of

renewable energy source is the production of little to no greenhouse gases which

helps in reducing global warming and air pollution. For example, wind turbines

in Denmark generate near-zero carbon emissions which help the country achieve

carbonic neutrality.

Furthermore, renewable energy sources provide sustainability as these are renewable.

The dams use hydropower to supply electricity to millions while maintaining

the ecosystem. It also reduces dependency

on fossil fuels which are major source of carbon emission.

Solar Energy:

Solar energy uses sunlight to produce electricity through photovoltaic cells and solar thermal systems. PV cells convert sunlight directly into electricity. The heat of sunlight plays important part. The initial installations can be expensive but long-term savings on electricity bills make it economical. The installation of solar cells can help in reducing carbon emission and therefore, can play important part in environment conservation. These solar cells can be installed in large amount in solar parks as well as in roofs of houses.

B) What are rocks? Describe rock cycle.
Definition.

Rocks are naturally occurring solid materials composed one or more minerals or mineraloids. They make up the Earth's crust.

and vary in composition and texture. Each type of rock provides valuable information about Earth's history and the processes of Earth's formation.

Types of Rocks.

Rocks are classified into three main types based on their formation processes

- 1) Igneous Rocks
- 2) Sedimentary Rocks.
- 3) Metamorphic Rocks.

1) Igneous Rocks :

Igneous rocks form when molten rock cools and solidifies. These rocks are hard, crystalline texture and resistant to weathering. Its prime examples are basalt and granite.

2) Sedimentary Rocks.

These rocks are created from the deposition, compaction, and cementation of sediments like sand, mud or organic material. These rocks often contain fossils. Sandstone and limestone are its example.

3) Metamorphic Rocks.

These rocks form due to result from the transformation of existing rocks due to high pressure and temperature but without

melting. Marble and slate are its example

The Rock Cycle:

The rock cycle explains the continuous transformation of rocks through natural processes over millions of years. It starts by magma's cooling and solidifies to form igneous rocks. Then these rocks break down into smaller particles which are transported by rivers. Over period of time, these cement together to form sedimentary rock and when these are subjected to heat, they transform into metamorphic form and when it melts, it become magma.

