

SUBJECT:- PHYSICS

CLASS:- XTH

DATE:- 15/07/XXI

SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 3. (SOURCES OF ENERGY) (BASED ON NCERT PATTERN)

- **Introduction to Source of Energy:-**

Source of energy is anything which supplies us useful energy for carrying out the various activities like

- (i) Heat energy to cook food
- (ii) Electrical energy to lighten the room.
- (iii) Muscular energy to carry bag and to run bicycle
- (iv) Sound energy to call friends.

- **Renewable and Non-Renewable Source of Energy:-**

Renewable source of energy is the energy source which can be replenished in short period. Example Solar energy, hydropower

An energy source which cannot be recreated in short period is categorized as **non-renewable source of energy**. Example Fossil Fuel-oil, natural gas, Coal

- **Good Sources of Energy:-**

A good source of energy has following characteristics:

- (i) It could do a large amount of work per unit volume or mass.
- (ii) It would be easily accessible.
- (iii) it would be easy to store and transport.
- (iv) It would be economical.

Conventional and Non -Conventional Source of Energy :-

Sources of energy which has been in use from Centuries are called the **conventional source of energy**. Example Wood,Coal,Petrol,hydro power

Source of energy which we have started using in recent times is called **Non-conventional energy sources** Example Nuclear energy, Geothermal energy, Solar energy, Ocean tides

- **Fossils Fuels:-**

-Fossils fuel are the remains of the pre-historic animal and plants buried under the earth millions of years ago.

-They are non-renewable sources of energy

- Since fossils fuels from plants and animals and they get energy from Sun, so their ultimate source of energy is Sun.

- **Turbine :-**

A turbine is device that rotates when steam, water or wind fall on its blades. The turbine turns the shaft of the electric generator and then electricity is produced.