

**VIDYA BHAVAN, BALIKA VIDYAPEETH**

**SHAKTI UTTHAN ASHRAM, LAKHISARAI, PIN:-811311**

**SUBJECT:- PHYSICS**

**CLASS:- XTH**

**DATE:23/05/XX**

**SUBJECT TEACHER:- MR. NEEL NIRANJAN**

**CHAPTER 3. SOURCES OF ENERGY**

**Nuclear Energy**

**Advantages:**

- Can produce huge amount of electricity.
- 1 Kg Coal can light up 1 Bulb for 8 hours.

1 Kg Uranium can light up 1 Bulb for  $3 \times 10^4$  years.

**Disadvantages:**

- High set up cost.
- Chance of accident - radiations emitted can cause huge loss to environment and civilization.
- Waste products are very harmful. Needs to be disposed carefully.

**Environmental Consequences**

- No source of energy is pollution free. It's good to use sources with less pollution.
- Burning fossil fuels causes air pollution.
- Vegetation submerged below hydropower dam leads to green house effect.
- CNG creates much lesser pollution than petrol and diesel.
- LPG is the best choice for cooking purpose because it releases more energy per unit mass, smokeless, does not cause air pollution and ash.

**ASSIGNMENTS**

1. Which fuel is best suitable for cooking purposes & why?
2. Why nuclear fission reaction is known as chain reaction?
3. What are the environmental consequences on burning fossil fuels?