

Q.6 Give an account of growth & development of nuclear science in India. What is the advantage of nuclear research in India? (150 words).

Ans. Nuclear energy & its use experienced skepticism in initial years of independence. Pt. Nehru visioned for nuclear weapons-free world.

But since he was always attracted towards technology, various developments had undergone. Due to these efforts, India was able to become 6th nuclear powered nation in world in 1998.

Journey of Nuclear Developments :-

1948 - Atomic Energy Act which advocated for peaceful development.

Dr. Homi Bhabha was authorised to lead nuclear programme.

1954 - significant infrastructure projects.

↳ Trombay Atomic Energy Establishment at Bombay.

↳ Dept. of Atomic Energy at

~~2008~~

secretariat.

Further, vision document of nuclear energy calls for utilising the abundant thorium present in monazite sands so as to achieve reliability in Nuclear fuels.

2008 - Indo-US Civil Nuclear Deal.
for providing technology & fuel to India.

Advantages :-

- ↳ to fulfill the demands of electricity as infrastructure is increasing.
- ↳ if handled carefully, then it causes less harm to environment.
- ↳ in medical field for treatment of cancer, radiotherapy etc.
- ↳ helps in deep space exploration by providing tremendous fuel.

However, world is using this energy to keep a check on their enemies by nuclear weapons.

Careful use & handling by govt. is crucial otherwise illegitimate use by ~~various~~ terrorist organisations can cause great harm to humans.