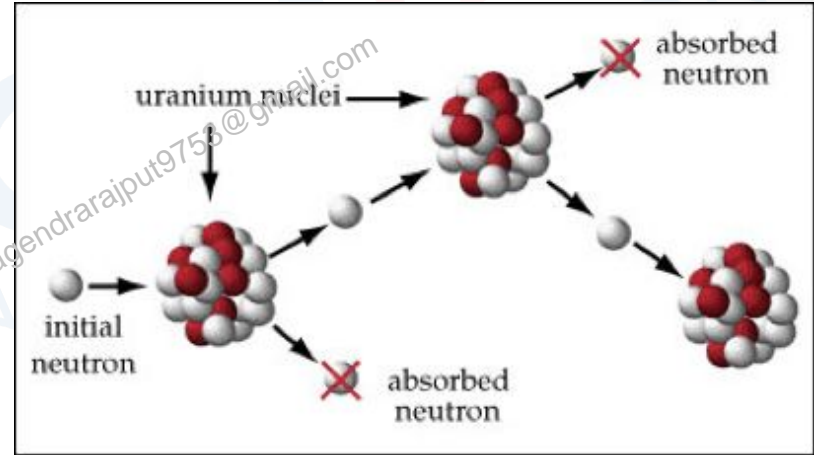
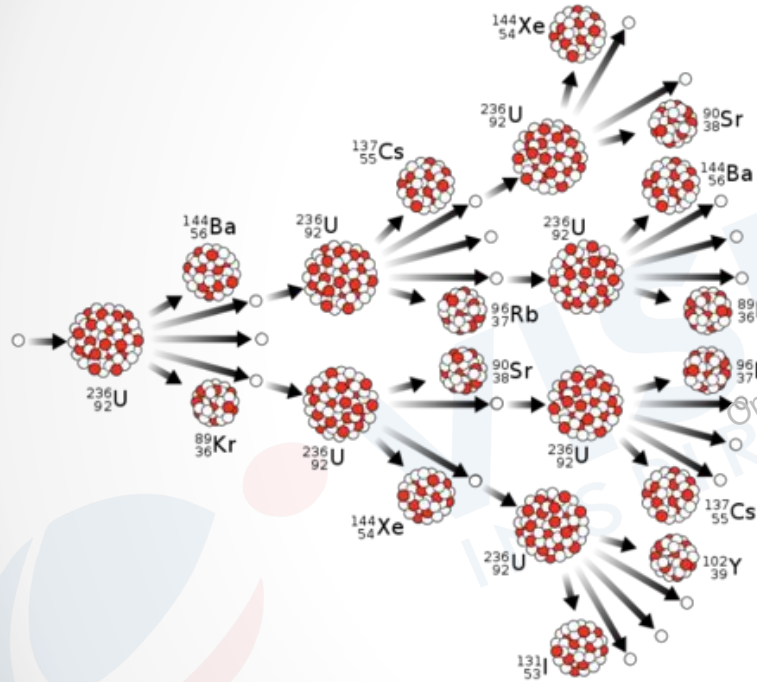
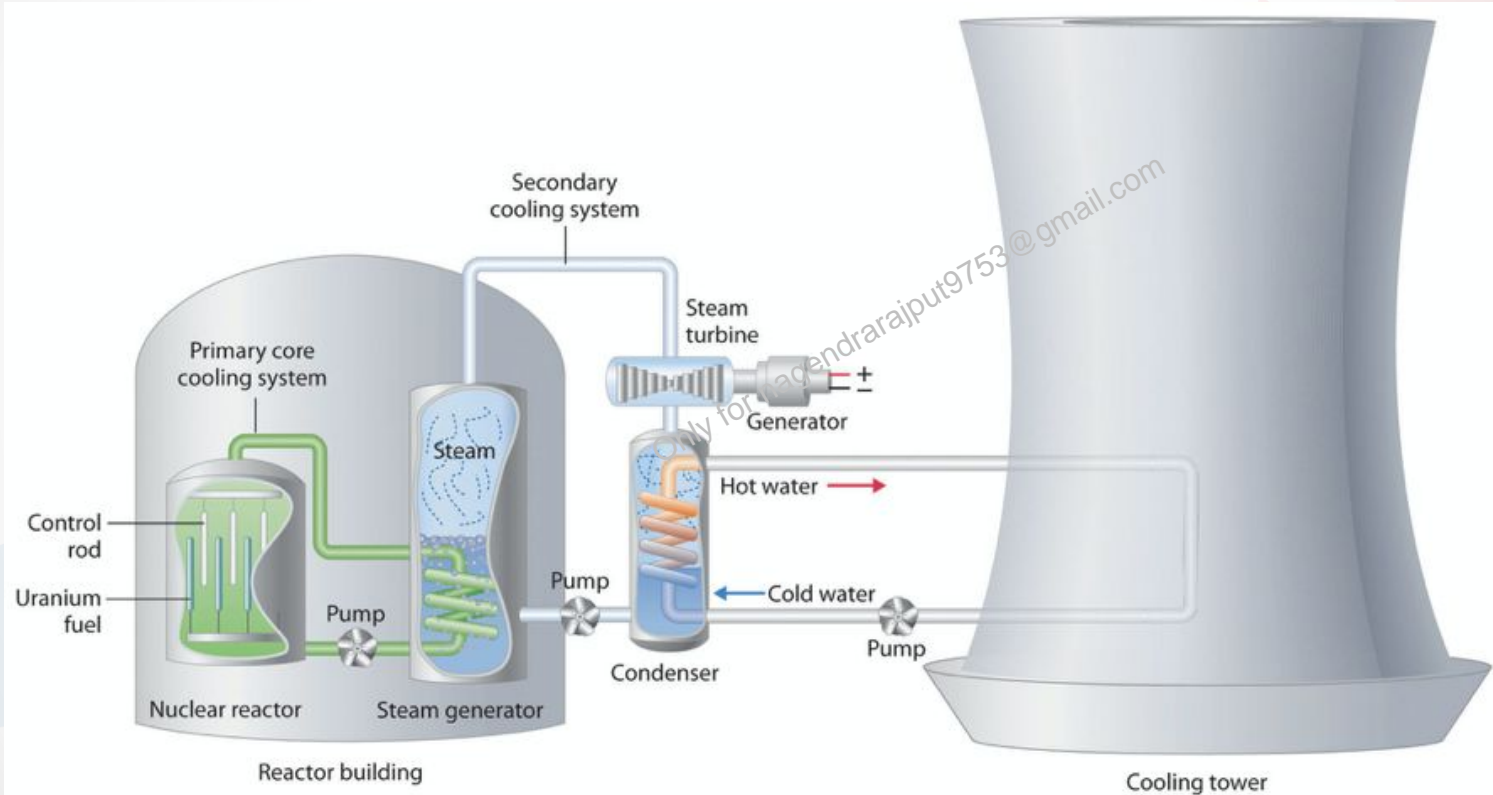


Nuclear Technology

Uncontrolled and Controlled Fission



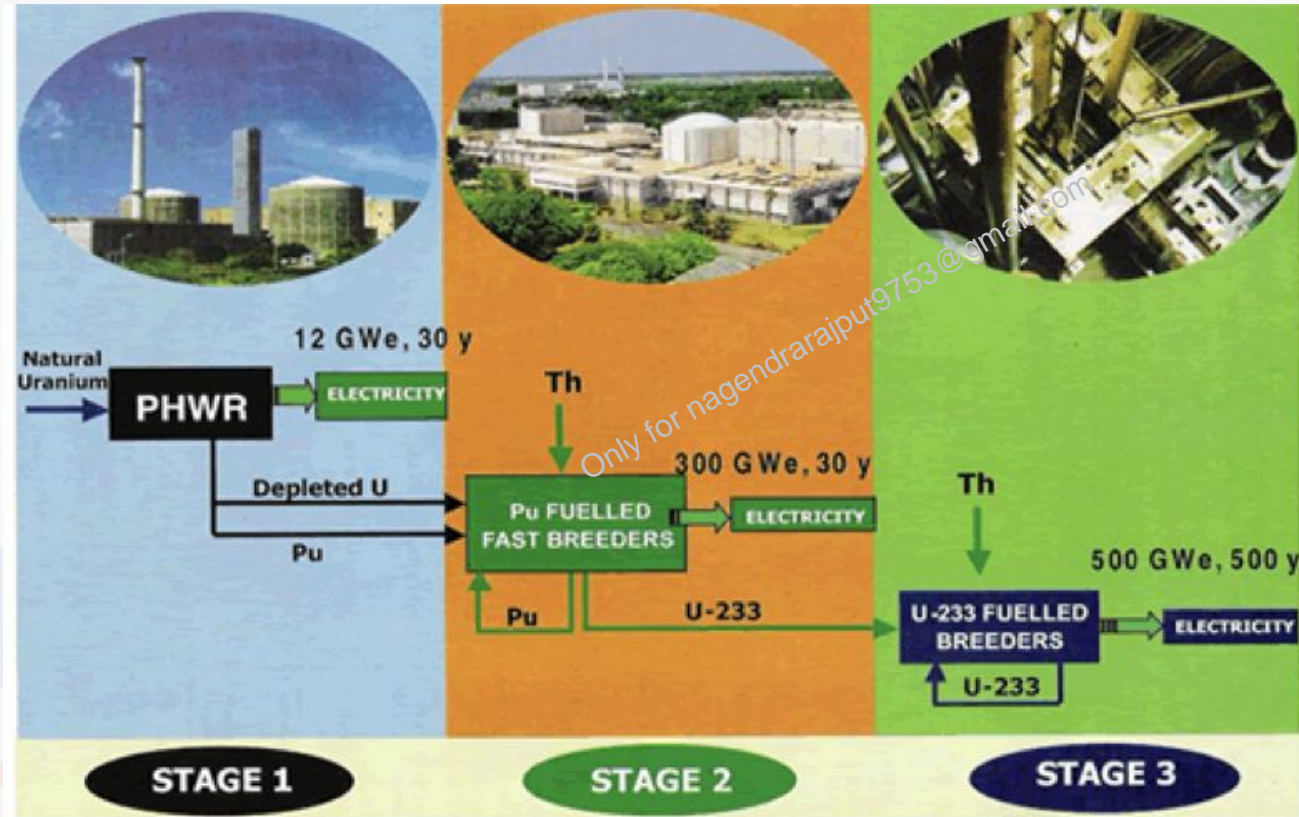
Nuclear reactor



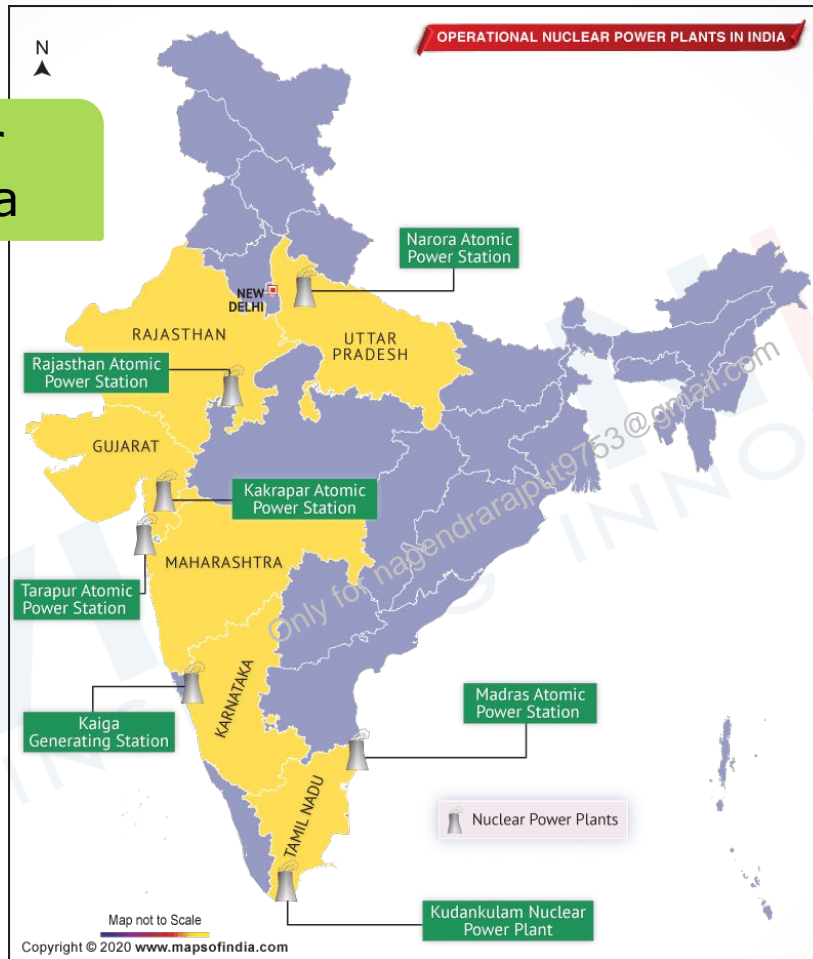
Major types of Reactor

- Pressurized Heavy Water Reactor
- Boiling Water Reactor
- Fast Breeder Reactor

3 Staged Nuclear Programme



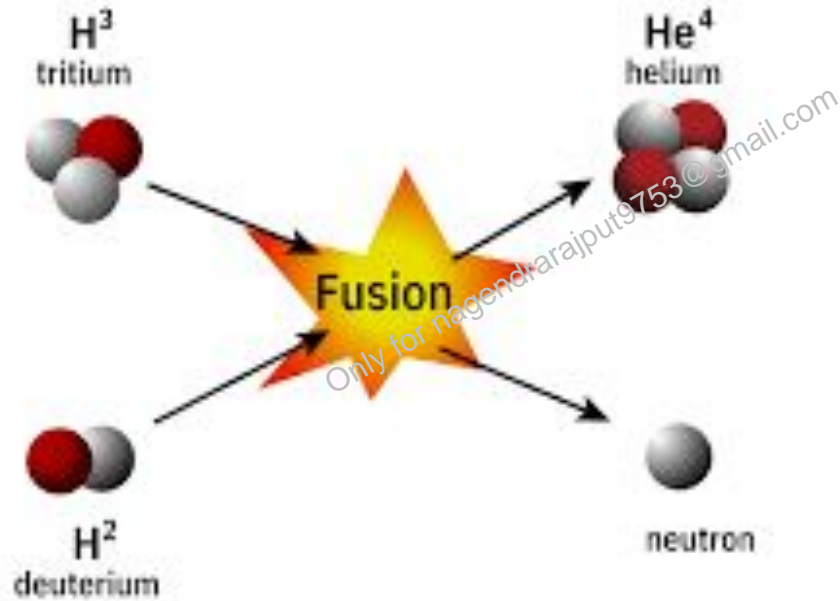
Operational Nuclear Power Plants of India



Radioisotopes

Radioactive Isotope	Applications in Medicine
Cobalt-60	Radiation therapy to prevent cancer
Iodine-131	Locate brain tumors, monitor cardiac, liver and thyroid activity
Carbon-14	Study metabolism changes for patients with diabetes, gout and anemia
Carbon-11	Tagged onto glucose to monitor organs during a PET scan
Sodium-24	Study blood circulation
Thallium-201	Determine damage in heart tissue, detection of tumors
Technetium-99m	Locate brain tumors and damaged heart cells, radiotracer in medical diagnostics (imaging of organs and blood flow studies)

Nuclear Fusion



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