

Science & Technology

(Dr. Ravi Agrahari)

Unit 1 - Science & Technology in India - (Self study).

✓ Unit 2 - ENERGY

✓ Unit 3 - SPACE TECHNOLOGY

✓ Unit 4 - COMMUNICATION and Information Technology.

✓ Unit 5 - Defence Technology

✓ Unit 6 - Superconductivity, Laser, Artificial Intelligence, Robotics, Nano Technology.

✓ Unit 7 - Intellectual Property Rights (IPR) & Related Rights.

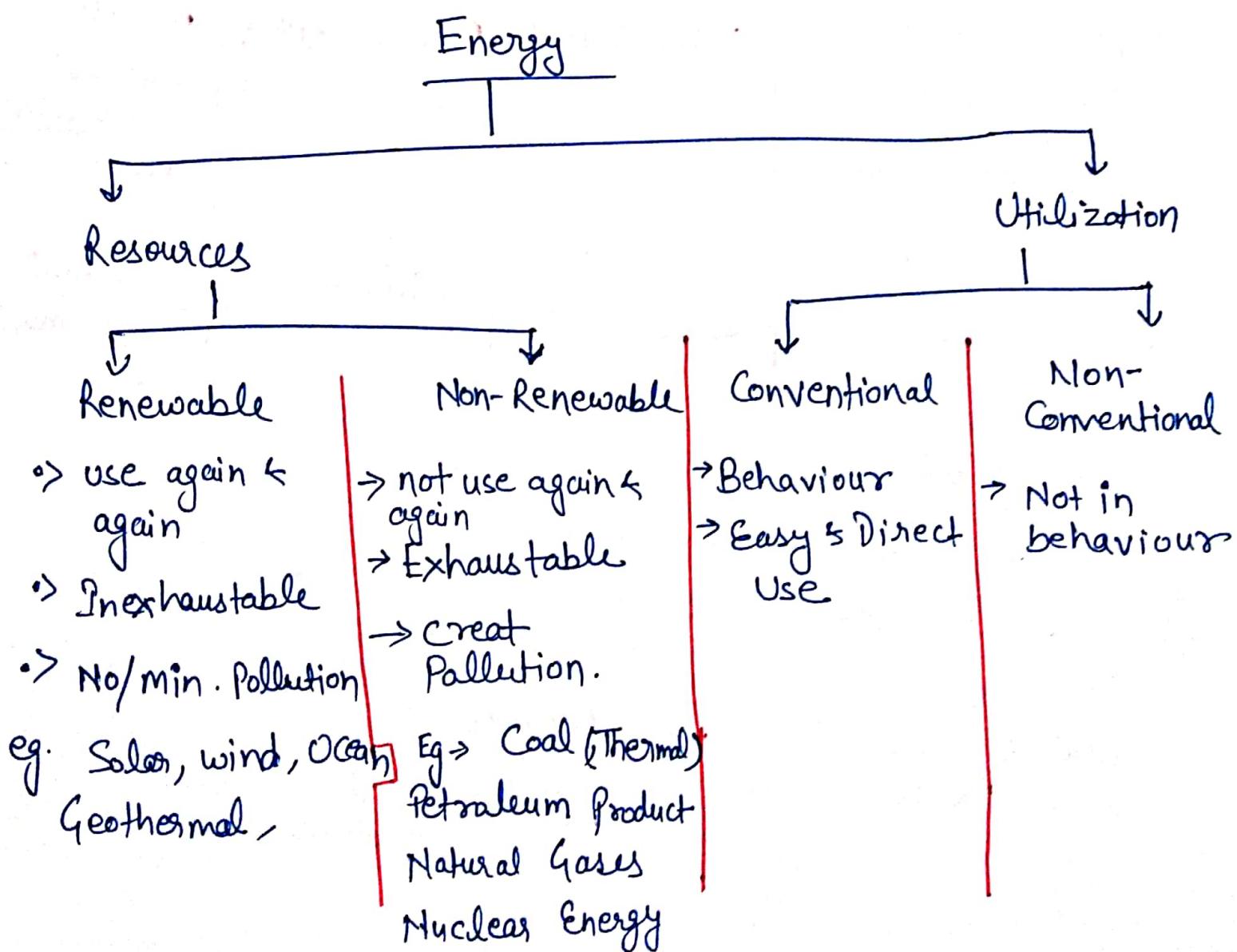
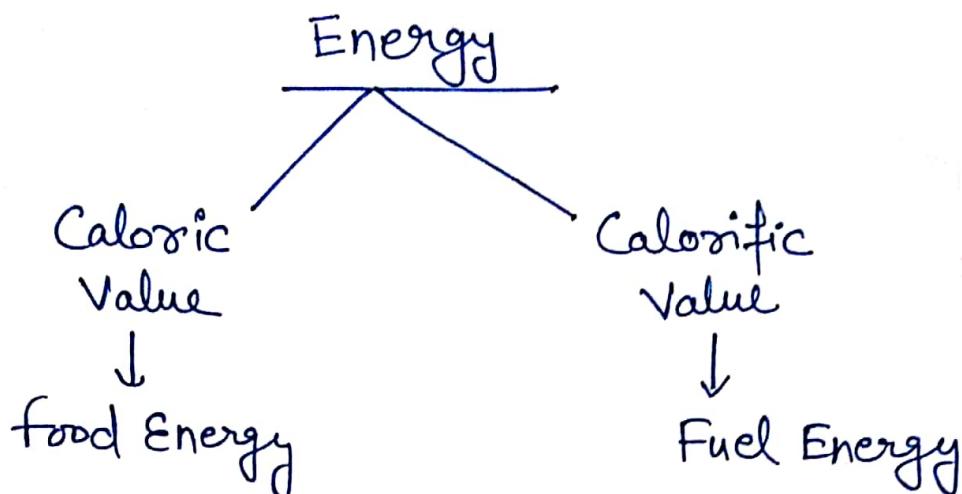
✓ Unit 8 - Astronomy & Particle Physics ✓

Biology
✓ Unit 9 - Biotechnology

Unit 10 - Different type of Diseases and its recent issues, Health & family welfare and Various immunisation programme.

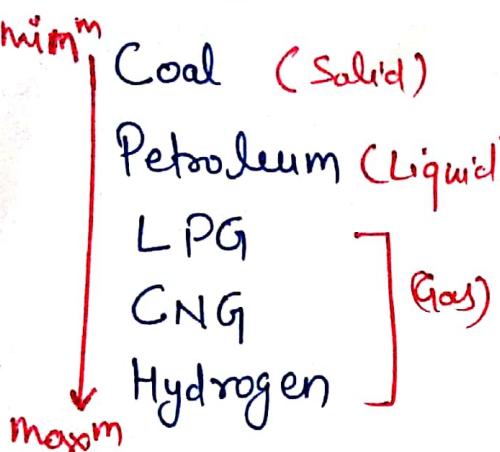
✓ Unit 11 - Miscellaneous Topics.

Chapter - Energy



(3)

Study of fuel on the basis of Calorific Value



Coal

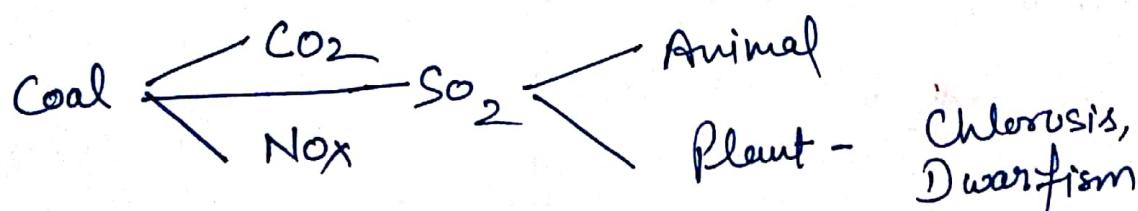
Types of Coal

		Carbon Content	Burning Efficiency	Results
→ 1.	Anthracite	> 85%.	maximum	Heat max ^m Smoke min ^m
→ 2.	Bituminous	55-85%.		Best
→ 3.	Lignite	35-55%.	minimum	Heat min ^m Smoke - max ^m
→ 4.	Peat	< 35%		Worst

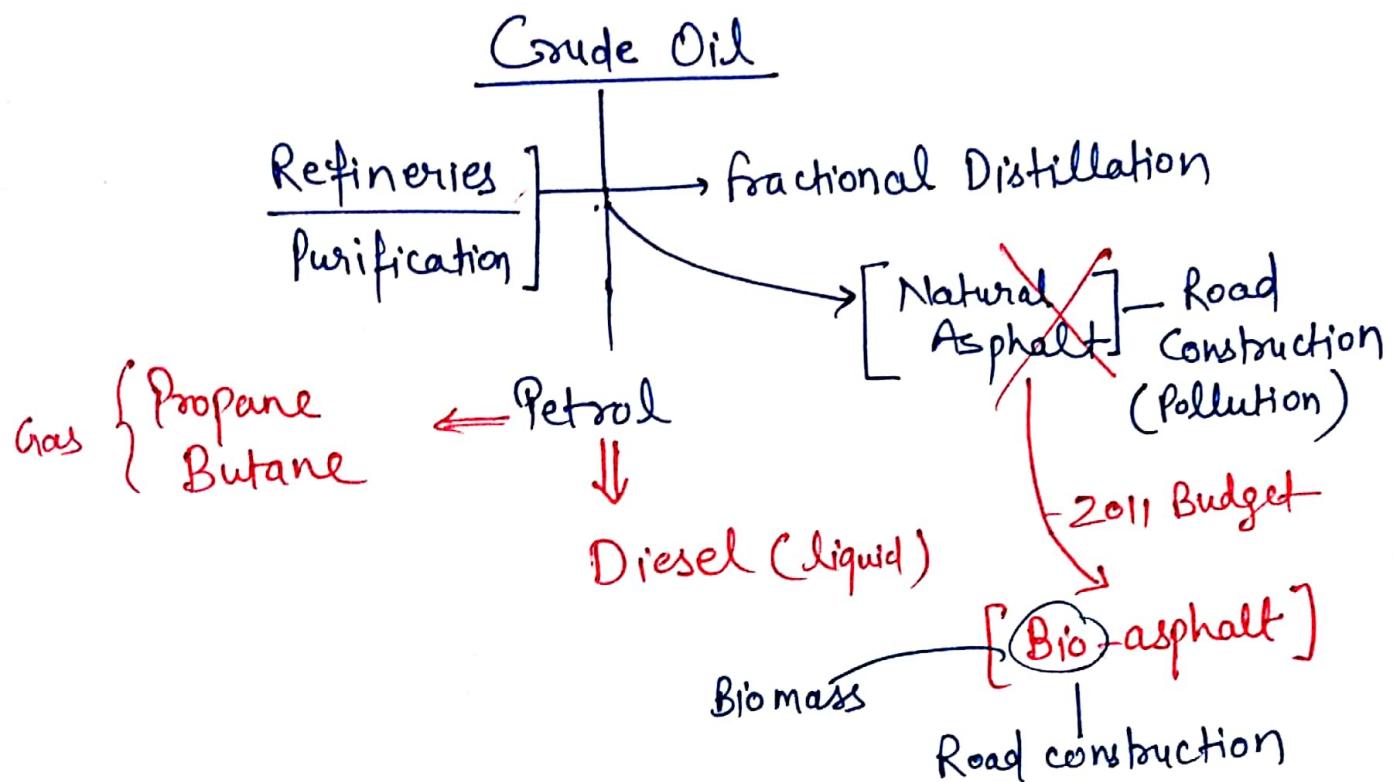
Lignite & Bituminous

Less heat & More smoke.

Sulphur content is less



Petroleum Products



Terminology

1. Knocking
2. Anti-knocking Agent
3. Octane no & Cetane No.
4. ULSD (Ultra Low Sulphur Diesel)/City Diesel
5. Gasohol