Liquid Oxygen

- 'Liquid oxygen' **is formed by separating pure oxygen from air**, which is the liquid form of molecular oxygen. For this, we cool the air rapidly, due to which, first the Xenon and then Krypton and Oxygen are converted into liquid. **This technique of separating gases from air is called 'Cryogenic Technique for Separation of Air'.**
- To convert oxygen into liquid, it has to be cooled to more than -183 °C. This entire process is completed under high pressure so that the boiling point of gases increases. **Liquid oxygen prepared by this process is up to 99.5% pure and does not have any impurities such as moisture, dust or other gases.**
- After changing to liquid form, it is supplied with cryogenic tankers, which are extremely cold and cannot be converted liquid oxygen in gas. This allows more oxygen to be transported in less space.
- The pure oxygen is used in as medical oxygen (in the form of gas) and in industry sectors (mainly steel and petroleum). **Medical oxygen is legally an essential medicine which is included in the list of essential medicines.** It is considered essential for three levels of healthcare- primary, secondary and tertiary. It is also included in the list of essential medicines of the World Health Organization.