



CLASS IX
DISASTER MANAGEMENT
UNIT V
CHAPTER 3

MAN MADE DISASTER – NUCLEAR, BIOLOGICAL AND CHEMICAL

NOTES

- Some common **man-made disasters** are **fires, traffic accidents, terrorist attacks, epidemic and pandemic like COVID-19.**
- More dangerous man-made disasters are **nuclear, biological e.g. Corona (SARS CoV-2) and chemical warfare weapons** that are used in the time of war.
- **NUCLEAR WEAPON** – Bombs or other warheads that derive their force from nuclear fission, nuclear fusion or both. Fission weapons are also known as **Atomic bombs** while fusion weapons are called **Hydrogen bombs**. It is delivered by an aircraft, missile or other system. The first Atom bomb was dropped on Hiroshima, Japan, by the USA on 6th August, 1945 during the World War II.
- **BIOLOGICAL WEAPON** – Biological warfare agents include many bacteria which cause Anthrax, Brucellosis, Typhus, and **viruses (Covid-19)** that cause diseases such as Equine Encephalitis.
- **CHEMICAL WEAPON** – Chemical weapons include choking agents such as chlorine and phosgene, blood agents such as **hydrogen cyanide** which block red blood cells from taking up oxygen, blister agents like **sulphur gas** which burn and blister the skin, and nerve agents such as Tabun, Sarin, Soman etc.
- In the event of explosions, fires and chemical leaks occurring in industrial establishments, people are exposed to the following dangers:- (a) Heat waves, (b) Poisonous gas, (c) Low oxygen level, (d) Combustion of various products and heat waves, (e) Falling of structural elements, (f) Contamination of nearby environment.
