

10. CHEMISTRY IN EVERYDAY LIFE

IMPORTANT POINTS

1. Basic terminology:

(i) Drugs: The chemical substances of low molecular masses ranging from 100 to 500U that react with macromolecular targets to produce a biological response are called drugs.

Ex: Painkillers, Sleeping pills

(ii) Medicines: The drugs that produce a therapeutic biological response and used in diagnosis, prevention and curing of diseases are called medicines.

Note: All medicines are drugs but all drugs are not medicines.

3.1 Analgesics are drugs used to reduce or abolish pain without causing impairment of consciousness, mental confusion, incoordination, paralysis etc. disturbances of nervous system.

3.2 Narcotic drugs: The alkaloids which cause depression of central nervous system and at the same time strong analgesics are called narcotic drugs. These are addictive drugs.

Ex: Morphine, Codeine etc.

Non-narcotic drugs: These drugs are analgesics but they have no addictive properties. Their analgesic use is limited to mild aches and pains like backache and headache. **Ex:** Aspirin, Ibuprofen.

3.3 Antipyretics are medicines like paracetamol, analgin, phenacetin decrease fever. **Ex:** Paracetamol

3.4 Tranquilizers are drugs mainly used in the management and treatment of Psychoses and Neuroses. **Ex:** Luminal, Seconal

3.5 Antiseptics are chemical substances that kill or prevent the growth of microorganisms. **Ex:** Dettol

3.6 Antibiotics are chemical substances produced by microorganisms that inhibit the growth or destroy microorganisms. **Ex:** Penicillin

3.7 Disinfectants are chemical substances applied to inanimate objects like floor. These are relatively more concentrated solutions than antiseptics.

Ex: Phenol

3.8 Antimicrobials kill or inhibit the growth of organism that cause diseases. They increase immunity and resistance to infection of the body. **Ex:** Lysozymes of eyes

3.9 Antifertility drugs are generally steroids. **Ex:** Norethindrone, Mifepristone

BULLET MASTER'S

CHEM BEATS!

Whenever we get a disease, we consult Doctors and they prescribe some medicines.

Lot of chemistry is being involved with the medicines that we take.

This chapter 'Chemistry in every day life'

specially focuses on chemistry of various types of drugs, medicines, chemical substances used against microorganisms, food preservatives.