



IIT-JEE · NEET · CBSE eBOOKS

CLASS 11&12th



CLASS 12th

Chemistry in Everyday Life



01. Medicine or Drugs

Chemical substances helping to a human body or an animal either for treatment of diseases or to reduce suffering from pain is called medicine or drug.

The treatment of disease by chemical compound which destroy the micro organism without attacking the tissue of the human body is known as chemotherapy, and the compounds used are called chemotherapeutic agents.

Various type of medicinal compounds are-

(i) Antiseptics:

Which prevents or destroys the growth of the harmful micro organism, common antiseptics are Dettol, Savlon, Cetavelon, acriflavin, lodine, methylene blue, mercurochrome & KMnO₄

Dettol is a mixture of chloroxylenol and terpineol. Its dilute solution is used to clean wounds. Bithional-It is added to soap to impart antiseptic properties

(ii) Disinfectants:

The chemical compounds capable of completely destroying the micro organism are termed as disinfectants.

These are toxic to living tissues.

These are utilized for sterilization of floor, toilets instruments & cloths.

eg. 1% solution of phenol in disinfectant while 0.2% solution of phenol is antiseptic.

(iii) Analgesics:

The substance which are used to get relief from pain. These are of two types

- (a) Narcotics or habit forming drugs
- (b) Non-narcotics
- (a) Narcotics: These are alkaloids and mostly opium products, causes sleep and unconciousness when taken in higher does.
 - e.g. Morphine, codeine, heroine
- (b) Non-narcotics: Analgesics belonging to this category are effective antipyretics also. e.g. Aspirin & novalgin, Ibuprofen, Naproxen

(iv) Antipyretics:

To bring down the body temp. in high fever are called antipyretics. e.g

- (a) Aspirin,
- (b) Analgin (Novalgin),
- (c) Paracetamol,
- (d) Phenacetin

$$\begin{array}{c|c} C-C-CH_3 & OH & OC_2H_5 \\\hline O & COOH & OH & OC_2H_5 \\\hline O & NH-C-CH_3 & NHCOCH_3 \\\hline \end{array}$$

(v) Antimalarials:

To bring down the body temperature during malarial fever. e.g. Quinine, Chloroquine, Paraquine and Primaquine etc.