

are used as an anti microbial agent.

\* Mercury (Hg) is used as mercuric chloride and as a component of mercuriochrome.

\* Silver (Ag) is commonly used as silver nitrate.

\* Two important halogens, chlorine and Iodine acts as oxidising agents that react with amino acid in proteins and change the nature of proteins.

Similarly, gases like ethylene oxide, formaldehyde and  $\beta$ -propiolactone are used to achieve sterilization.

### (F) Filtration -

Filtration is a physical removal of all cells in a liquid or gas. It is specially important for sterilisation of solution which would be denatured by heat (e.g. antibiotics, amino acids, vitamins etc)

- In this process solutions or gases are passed through a filter of sufficient pore diameter (generally  $0.22 \mu\text{m}$ ) to remove the smallest known bacterial cells.

- Filtration is carried out commonly by using