PHARMACEUTICAL INORGANIC CHEMISTRY- BP104T

UNIT: 3 (GASTROINTESTINAL AGENTS)

CLASS: 6

TOPIC: CATHARTICS – KAOLIN & BENTONITE

KAOLIN (Al_2O_3 .2SiO . $2H_2O$)

Molecular weight: 258.16 g/mol

Synonym: Native hydrated aluminum silicate. Upon drying; it gets free from impurities

Properties:

Appearance: It is light, white powder free from gritty particles.

Odour: Odourless

Taste: Tasteless and having greasy or soapy to the touch.

Preparation: It is prepared from natural clay by powdering and separating particles by sedimentation. It must be purified from gritty particles and other impurities.

Uses:

- It used in the mixtures which are intended for dysentery, diarrhoea and for symptomatic treatment of cholitis, cholera.
- It is used in the treatment of food and alkaloid poisoning, as it adsorbs toxins.
- It is used in dusting powders, cosmetic preparations etc.

Dose: 150 - 75 g/mol

BENTONITE: (Al_2O_3. 4 SiO_3. H_2O)

Molecular weight: 422.29 g/mol

Synonym: Colloidal hydrated aluminum silicate that occurs naturally

Properties:

Appearance & Color: A very fine, pale or cream coloured powder.

Odor: Odourless, free from grit

Taste: Slightly earthy taste.

Solubility: It is almost insoluble in water but swells to about 12 times its volume after neutralisation.

Uses:

- It is a good pharmaceutical aid and is used as a protective colloid to stabilize emulsions.
- Mainly it is used to suspend other insoluble powders.
- It finds use as an emulsifier for oil in water emulsions.

2 MARKS QUESTIONS

1. Write the uses of Kaolin and bentonite

5 MARKS QUESTIONS

1. Write a note on kaolin
2. Write a note on bentonite