PHARMACEUTICS-I (BP103T)

UNIT: 2

CLASS: 6

TOPIC: POWDERS

✓ Geometric dilution

• The method is used when potent substances are to mixed with a large amount of diluent. The potent drug is placed upon an approximately equal amount of the dilute in a mortar and the substances are slightly mixed by trituration. A second portion of diluent equal in volume to the powder mixture in the mortar is added and trituration is repeated. The process is continued, adding diluent equal in volume to the mixture in the mortar at each step, until all the diluent is incorporated.

• For example, if 100 mg of potent drug is required to be mixed with 900 mg of lactose, then according to geometric dilution, the following procedure should be followed:

• 100 mg of a potent drug + 100 mg of lactose = 200 mg of mixture

• 200 mg of the mixture + 200 mg of lactose= 400 mg of mixture

• 400 mg of the mixture + 400 mg of lactose= 800 mg of mixture

• 800 mg of the mixture + remaining portion of lactose= 1000 mg of mixture.

✓ Sifting

• The powders are mixed by passing through sifters. This process results in a light fluffy product and is generally not acceptable incorporation of potent drugs into a diluent base.

✓ Tumbling

• It is the process of mixing powders in a large container rotated by an electronic motor. These blenders are widely employed in industry as large volume powder mixers.

Packaging

• Powders may be wrapped in paper or dispensed in bulk powder in a wide mouth container.

• Wrapping of powders: White glazed paper is generally used for wrapping. The wrapping should be done on a clean tile or large sheet of a glazed paper to protect the product.

L.Ramanamma
Assistant Professor

2 MARKS QUESTIONS

1. Define sifting.
2. What are the different methods of mixing.

5 MARKS QUESTIONS

1. Give a detailed note on geometric dilution.
2. Explain briefly about mixing of powders.

10 MARKS QUESTIONS

1. Define & classify powders. Explain the types of powders and give their official preparations.

L.Ramanamma
Assistant Professor