

PHARMACEUTICAL ANALYSIS – BP102T

UNIT : II ACID-BASE TITRATIONS AND NON-AQUEOUS TITRATIONS

CLASS:11

TOPIC: ACID-BASE TITRATION

ACID-BASE TITRATION:

It is mainly based upon neutralization reaction between acid and base is called neutralization titration.

In acid-base titrations, standard solutions having known concentration of acid is titrated against unknown concentration of base and vice-versa.

Titration:

It is a process where solution of known concentration is used to determine concentration of an unknown concentration.

During titration, titrant (Known solution) is added from burette to titrand (unknown solution) i.e till end point (occurs by indicator)

Titrant: A solution with known concentration which is taken in burette.

Titrand: A solution with unknown concentration which is taken in conical flask.

Indicator: A substance which is added in titrand for identifying end point.

Equivalent point: when moles of titrand or analyte is equal to moles of titrant (i.e Known concentration)

End Point: Point which indicates that reaction is completed by changing the colour of solutions. it is defined as adding of titrant to titrand

Non-aqueous titrations:

Most of the drugs or pharmaceuticals agents are weakly acidic or weakly basic in nature.

These substances should be titrated by using non-aqueous solvents to get sharp end point.

Most of the drugs are truly soluble in water.

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