

Bio-Molecules

* Tests for detection of carbohydrates :-

-> સ્વાદીય શીઘ્ર (ગ્લુકોઝ, ફ્રુક્ટોઝ, માલ્ટોઝ, સુક્રોઝ, લાક્ટોઝ) માટે
 કાર્યક્રમ શીઘ્ર માટે દેવા કરવા.

1) Molish Test :-

સ્વાદીય શીઘ્ર + Molish ની reagent = purple ring

2) Benedict Test :-

સ્વાદીય શીઘ્ર + Benedict reagent (boil) = Red PPTS

3) Barford's Test :-

સ્વાદીય શીઘ્ર + Barford's reagent (boil) = Red PPTS

4) Selivernoff's Test :-

સ્વાદીય શીઘ્ર + selivernoff's reagent (boil) = Red PPTS

Red PPTS Present = fructose

Red PPTS absent = Glucose

5) Iodine's Test :-

સ્વાદીય શીઘ્ર + Iodine's reagent = Blue colour

Blue colour Present = starch

6) cobalt chloride Test :-

સ્વાદીય શીઘ્ર + cobalt chloride reagent ->

Boil - cool and add drops NaOH

Greenish blue colour = Maltose Present

Purplish blue colour = sucrose Present

Remarks

Teacher's Signature

Dr. J. J. Brett

unknown solution

Molish Test

Positive (Purple) ring present

I₂ Test

Colour (Polysaccharide) present

Blue colour - starch

No colour may be monosaccharide or disaccharide

Benedict Test

Boil

Red PPTS
Reducing sugar present

No Red PPTS
Non Reducing sugar - sucrose

Barfoord's Test

Boil

Red PPTS
Monosaccharide

No Red PPTS
Disaccharide

Selivernoff's Test

Boil

No Red colour
Glucose

Red colour
Fructose

Cobalt chloride Test

boil - cool and add drops NaOH

Green blue

Maltose

Purplish blue

Sucrose