

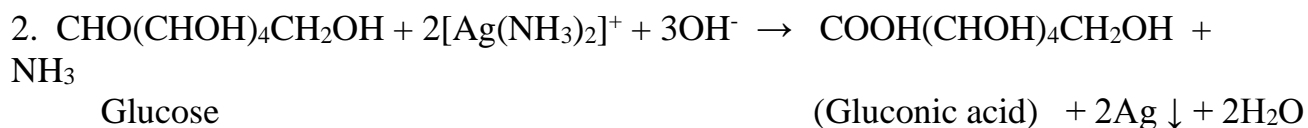
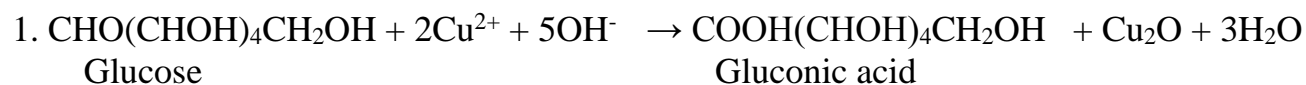
CARBOHYDRATE TEST

AIM: To test the presence of carbohydrate in the given food sample.

PROCEDURE:

S.No	EXPERIMENT	OBSERVATION	INFERENCE
1	<u>CONC H₂SO₄ TEST</u> Food sample + conc. H ₂ SO ₄ . Heat	Charring occurs with smell of burnt sugar	Carbohydrate present.
2	<u>MOLISCH'S TEST</u> Food sample + Molisch's reagent (1% alcoholic solution of α naphthol) + conc. H ₂ SO ₄ along the sides of the test tube.	A purple ring is obtained at the junction of the two layers.	Carbohydrate present.
3	<u>BENEDICT'S / FEHLING'S TEST</u> Food sample + Benedict's reagent/ Fehling's reagent (A mixture of equal amounts of Fehling's A and Fehling's B). Heat.	A red ppt. is obtained.	Carbohydrate present.
4	<u>TOLLEN'S TEST</u> Food sample + Tollen's reagent (amm. silver nitrate solution). Heat on water bath.	A silver mirror is obtained the walls of the test tube.	Carbohydrate present.

EQUATIONS: (ON BLANK SIDE USING A PENCIL)



RESULT: : (ON RULED SIDE) The food sample has been tested for carbohydrate.

OIL FAT TEST

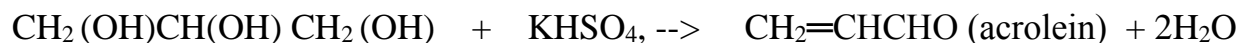
AIM: To test the presence of oil or fat in the given food sample.

PROCEDURE:

S.No	EXPERIMENT	OBSERVATION	INFERENCE
1	<u>SOLUBILITY TEST</u> Food sample + water Food sample + chloroform(CHCl_3)	Does not dissolve Miscible	Oil / fat present.
2	<u>SPOT TEST</u> Smear the food sample on paper.	A translucent spot is observed.	Oil / fat present.
3	<u>ACROLEIN TEST</u> Food sample + KHSO_4 . Heat	An irritating odour is obtained.	Oil / fat present.

EQUATIONS: (ON BLANK SIDE USING A PENCIL)

Oil/ fat --> glycerol + fatty acid



RESULT: (ON RULED SIDE) The food sample has been tested for oil/fat

PROTEIN TEST

AIM: To test the presence of protein in the given food sample.

PROCEDURE:

S.No	EXPERIMENT	OBSERVATION	INFERENCE
1	<u>BIURET TEST</u> Food sample + few drops of NaOH + CuSO ₄ solution.	A violet colouration is obtained.	Protein present.
2	<u>XANTHOPROTEIC TEST</u> Food sample + few drops of conc. HNO ₃ . Heat.	A yellow ppt. is obtained.	Protein present.
3	<u>NINHYDRIN TEST</u> Food sample + few drops of 0.15 ninhydrin solution. Boil the contents.	A blue colour is obtained.	Protein present.

RESULT: (ON RULED SIDE) The food sample has been tested for proteins.