EXPERIMENT No.11

AIM: To test the presence of aldehydic group in the given organic compound.

PROCEDURE:

S.No	EXPERIMENT	OBSERVATION	INFERENCE
1	2,4-DNP TEST Organic compound + 2,4-DNP	Crystalline orange ppt. obtained	Carbonyl group present.
2	TOLLEN'S TEST Organic compound + Tollen's reagent (amm. silver nitrate solution). Heat on water bath.	A silver mirror is obtained the walls of the test tube.	Aldehydic group present.
3	BENEDICT'S / FEHLING'S TEST Organic compound + Benedict's reagent/ Fehling's reagent (A mixture of equal amounts of Fehling's A and Fehling's B). Heat.	A brick red ppt. is obtained.	Aldehydic group present.
4	SCHIFF"S TEST Organic compound + Schiff's reagent	A red/ pink/violet colouration is obtained.	Aldehydic group present.

EQUATIONS: (ON BLANK SIDE USING A PENCIL)

1. $RCHO + NH_2NH =$ 

(equation 1 is incomplete)

2. $RCHO + 2[Ag(NH_3)_2]^+ + 3OH^- \rightarrow RCOO^- + 4NH_3 + 2Ag\downarrow + 2H_2O$
3. $RCHO + 2Cu^{2+} + 5OH^- \rightarrow RCOO^- + Cu_2O + 3H_2O$

RESULT: ***(ON RULED SIDE)*** Aldehyde present in the given organic compound.