EXPERIMENT No.12

AIM: To test the presence of ketonic 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	m-DINITROBENZENE TEST Organic compound + m-dinitrobenzene + NaOH	A violet colouration is obtained.	Ketonic group present.
3	SODIUM NITROPRUSSIDE TEST Organic compound + sodium nitroprusside + NaOH	A red colouration is obtained.	Ketonic group present.

EQUATIONS: (ON BLANK SIDE USING A PENCIL)

1. $CH_3COCH_3 + OH^- \rightarrow CH_3COCH_2^- + H_2O$

$[Fe(CN)_5NO]^{2-} + CH_3COCH_2^- \rightarrow [Fe(CN)_5NO(CH_2COCH_3)]^{3-}$

Nitroprusside ion — Red complex

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