EXPERIMENT No.13

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

PROCEDURE:

S.No	EXPERIMENT	OBSERVATION	INFERENCE
1	LITMUS TEST Organic compound + blue litmus	Blue litmus turns red	Carboxylic acid may be present.
2	SODIUM BICARBONATE TEST Organic compound + aq. NaHCO ₃	Brisk effervescence is obtained.	Carboxylic acid group present.
3	ESTER TEST Organic compound + few drops of alcohol + 2-3 drops of conc. H ₂ SO ₄ + heat on a water bath. Cool the contents and pour them into cold water.	A fruity smell is obtained.	Carboxylic acid group present.

EQUATIONS: (ON BLANK SIDE USING A PENCIL)

RCOOH + NaHCO₃ → RCOONa + H₂O + CO₂↑

2. RCOOH + CH₃CH₂OH conc.H₂SO₄ RCOO CH₂CH₃

RESULT: : (ON RULED SIDE) Carboxylic acid present in the given organic compound.