EXPERIMENT No.9

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

PROCEDURE:

| S.No | EXPERIMENT | OBSERVATION | INFERENCE |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|
| 1 | CERRIC AMMONIUM NITRATE TEST Organic compound + few drops of cerric ammonium nitrate solution. Shake well. | A pink or red colour appears. | Alcoholic –OH group present. |
| 2 | ESTER TEST Organic compound + few drops of glacial acetic acid + 1-2 drops of conc. H ₂ SO ₄ + warm on water bath for 5 min. Cool and pour into 15ml of Na ₂ CO ₃ solution. Smell the contents. | A fruity smell is obtained | Alcoholic –OH group present |

EQUATIONS: (ON BLANK SIDE USING A PENCIL)

1. ROH +
$$(NH_4)_2Ce(NO_3)_6$$
 \rightarrow $(NH_4)_2[Ce(OR)(NO_3)_5]$ + HNO₃
Cerric amm. nitrate pink or red
2. ROH + CH_3COOH \rightarrow CH_3COOR + H_2O

RESULT: (ON RULED SIDE) - Alcoholic –OH present in the given organic compound.