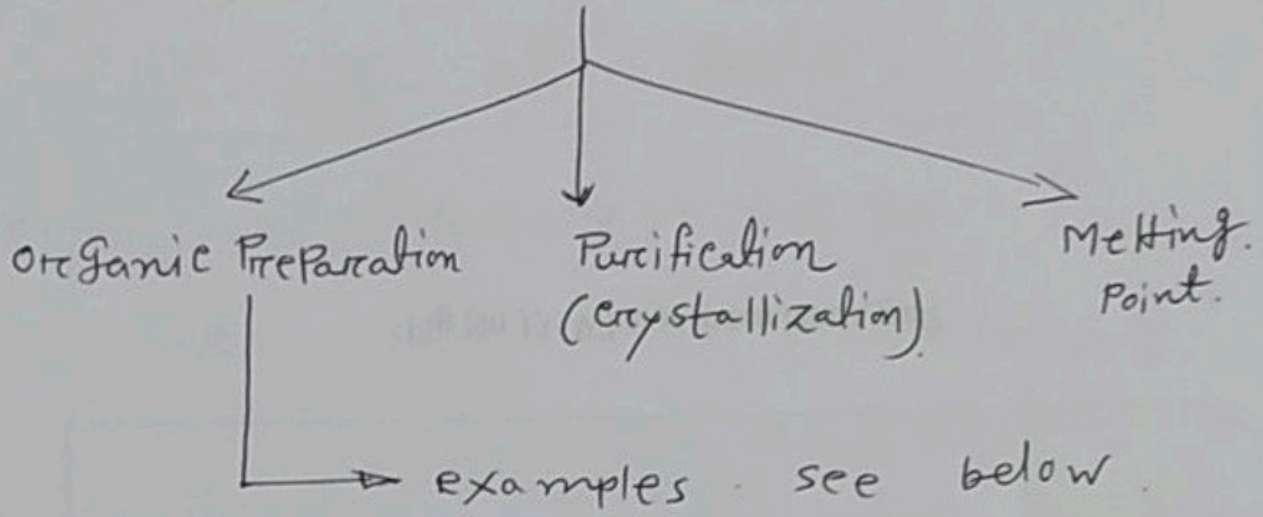


FM-15 / Paper code - CEMHDCP4

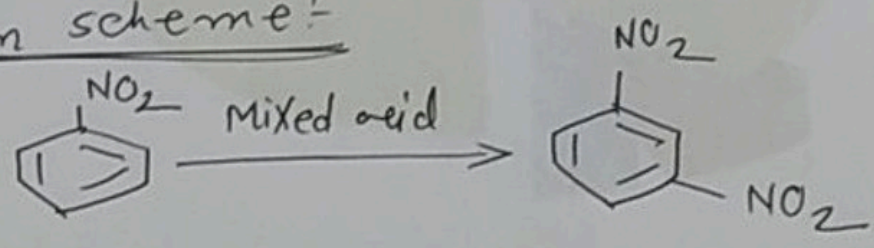
(Organic Practical)



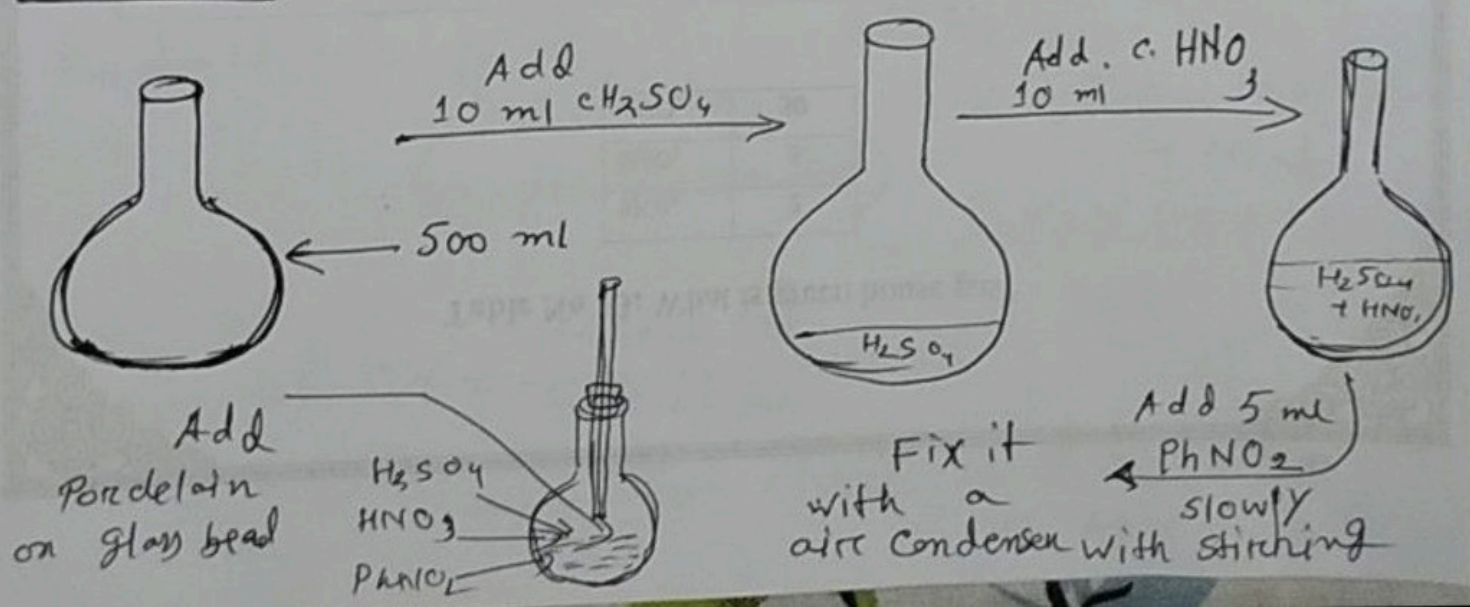
1) Nitration of aromatic compounds

- i) nitrobenzene → meta-dinitrobenzene
- ii) Acetanilide → p-nitroacetanilide.

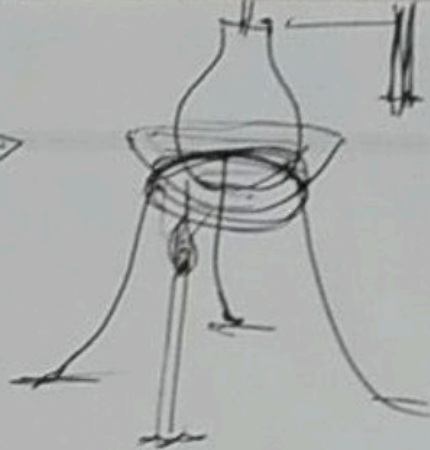
Rexn scheme:



Procedure →



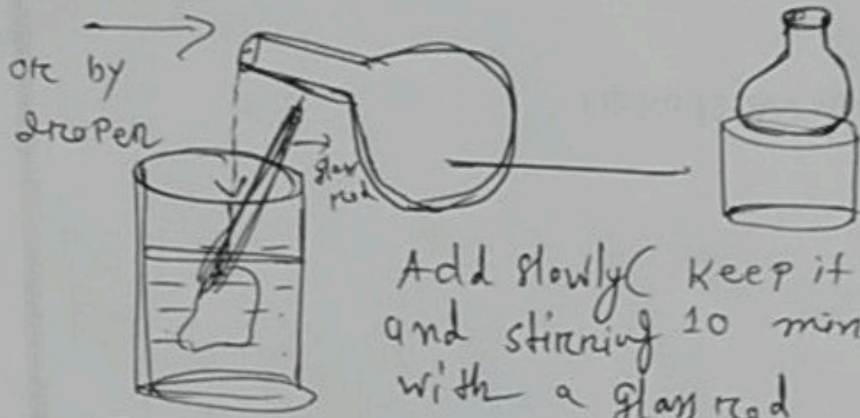
Heat in a water bath for 45 minutes / 1 Hr.



After 1 Hr

- 1) Shake the RB.
- 2) check the water level.
- 3) check the burner.

Keep it out from water bath (Remove air condenser)



Add slowly (Keep it for and stirring 10 minutes) with a glass rod

Running

Tap

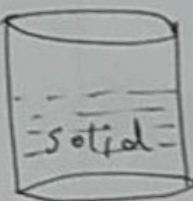
250 ml beaker

50% vol - H<sub>2</sub>O level + ice

(After addition all the mix. to ice-cold water.)

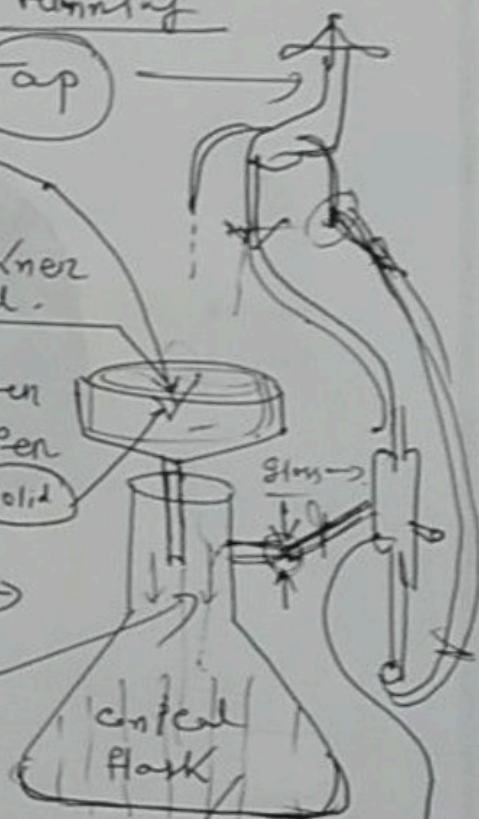


Buchner funnel with Filter Paper (Solid)



Filter

Suction filtration



Poekeling Roll no. / BT

Take out Buchner funnel

Vacuum

(washed with ice cold water 3/4 times)

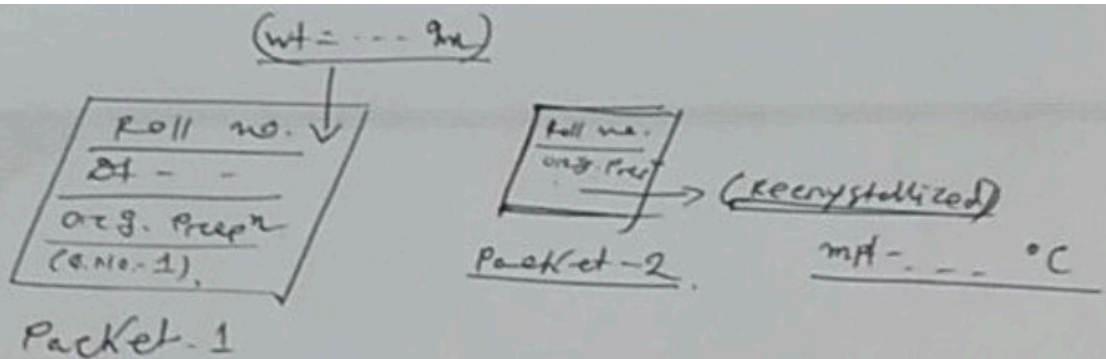
filtrate (Yellow)

Suction apparatus



Paper (Filter or Parchment paper)

10-15 ml

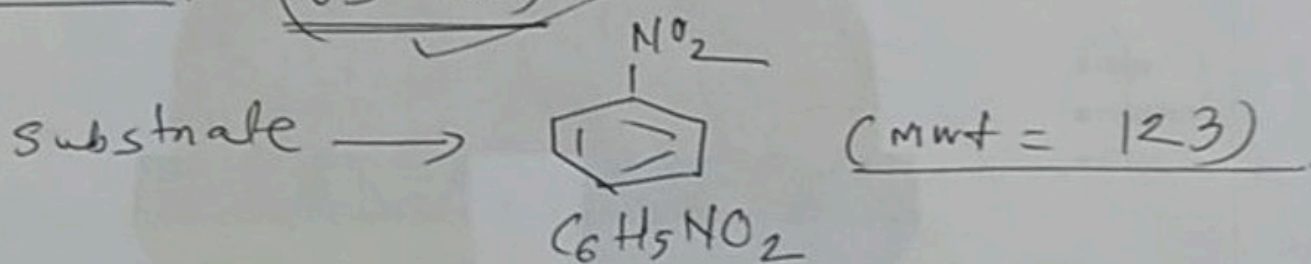


\* % age of yield = ?

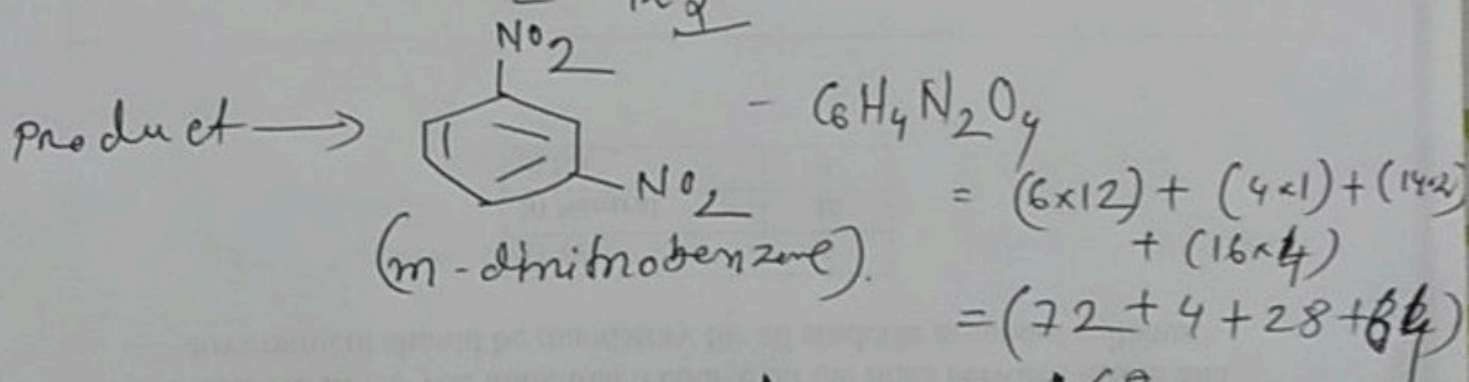
$\text{PhNO}_2 \rightarrow$  (density =  $1.2 \text{ gm/cc}$ ).

$$\begin{aligned}
 5 \text{ ml} - \text{PhNO}_2 &\rightarrow (\text{vol} \times \text{density}) \\
 &= (5 \times 1.2) \text{ gm} \\
 &= \underline{6} \text{ gm}
 \end{aligned}$$

Pdt  $\rightarrow$  (6.5 gm)



$$\begin{aligned}
 &(6 \times 12) + (5 \times 1) + (14 \times 1) + (16 \times 2) \\
 &= (72 + 5 + 14 + 32) \\
 &= \underline{123}
 \end{aligned}$$



$$\begin{aligned}
 &= (6 \times 12) + (4 \times 1) + (14 \times 2) \\
 &\quad + (16 \times 4) \\
 &= (72 + 4 + 28 + 64) \\
 &= \underline{168}
 \end{aligned}$$

$$\begin{aligned}
 \% \text{ age of CY} &= \frac{\text{mole of Pdt}}{\text{mole of sub.}} \times 100\% \\
 &= \frac{6.5/168}{6/123} \times 100\% = 79.31\% \\
 &\approx \underline{79\%}
 \end{aligned}$$