

2020

S M T W T F S S M T W T F S

1 2 3 4 5 6 7

8 9 10 11 12 13 14 15 16 17 18 19 20 21

22 23 24 25 26 27 28 29 30 31

AMINES - CLASSIFICATION & CHARACTERIZATION

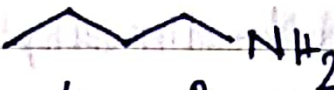
Monday

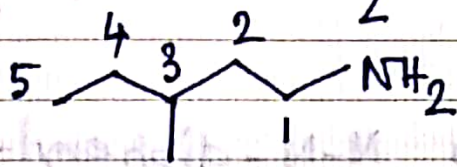
03

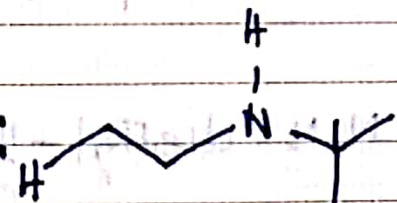
Week-6 (034-332) Feb 2020

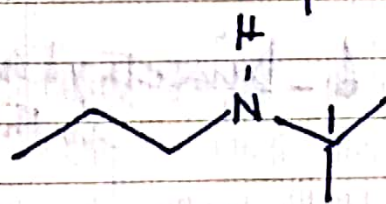
Amines — the hydrocarbon derivatives of NH_3 where one or more H atoms are replaced by alkyl group/s.

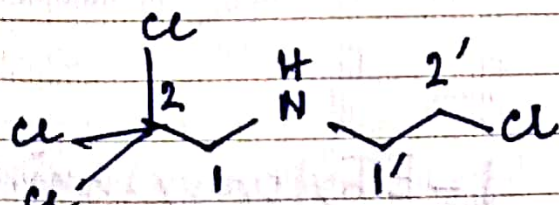
Amines may be classified as primary, secondary or tertiary amines having 1, 2 & 3 H atoms of NH_3 replaced respectively.

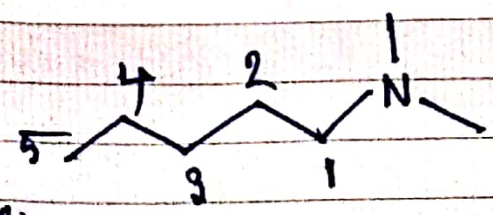
1^o amines:  Butanamine

 3-methylpentanamine
/ 1-amino-3-methylpentane

2^o amine:  1-methyldiethylamine

 N-(1-methylethyl)propylamine

 2,2,2,2-tetrachlorodiethylamine

3^o amine:  N,N-dimethylpentylamine

04

Thursday

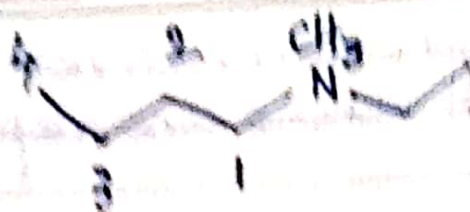
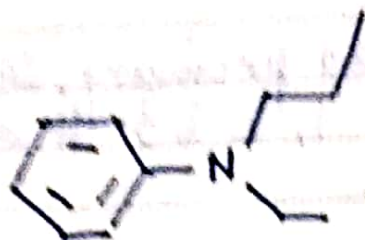
Feb 21, 2020

Week 0 (0318-331)

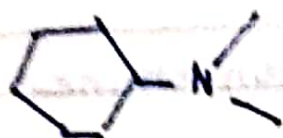
February

2020

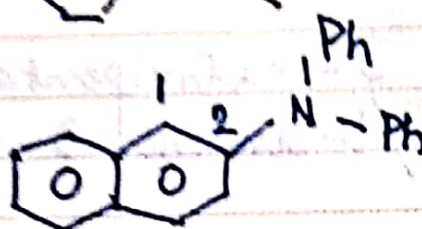
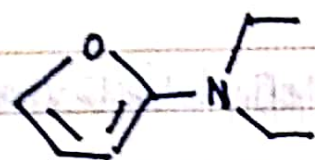
S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29							

N-ethyl-N-methyl
butylamine

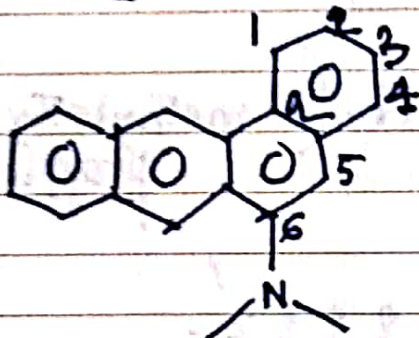
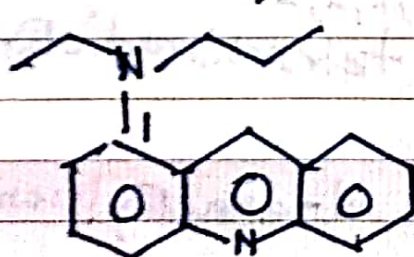
N-ethyl-N-propylaniline



N,N-dimethylcyclohexylamine

N,N-diphenyl-2-
naphthylamine

N,N-diethyl-2-furanamine

6-Dimethylaminoberzo[a]
anthracene

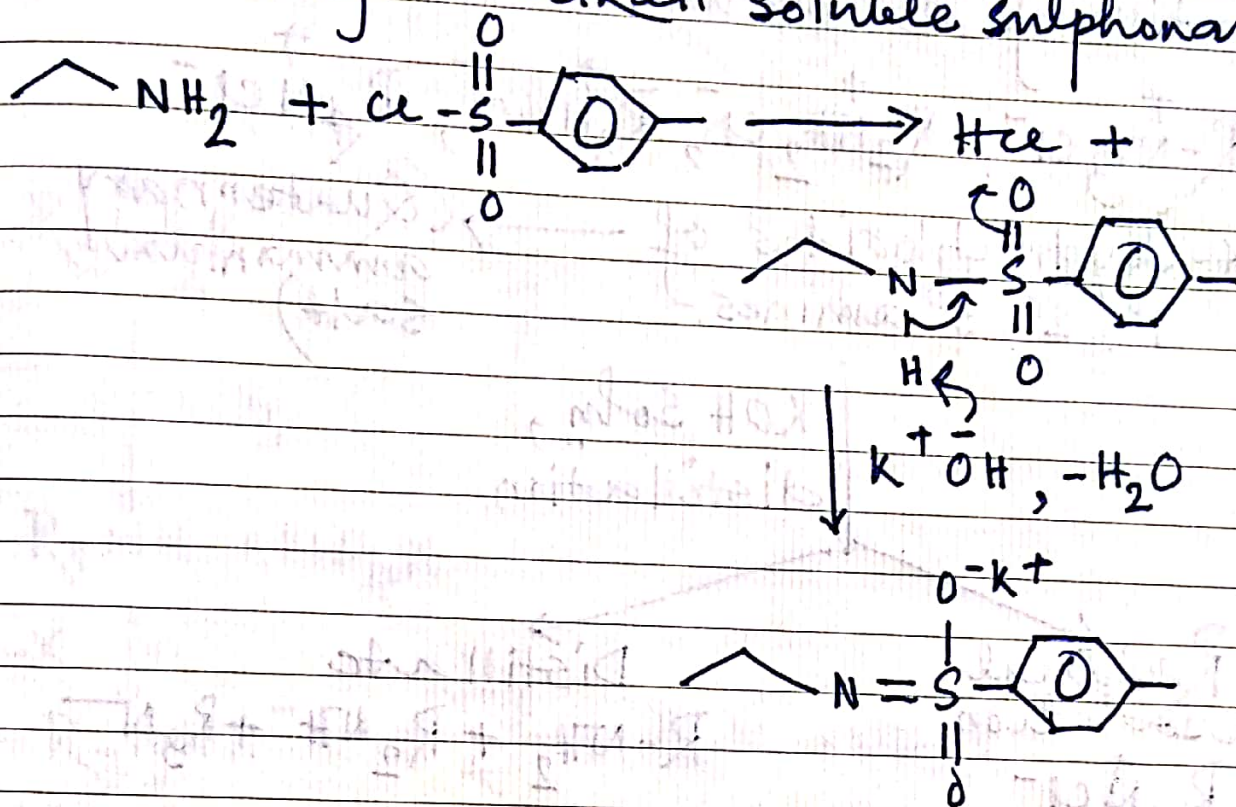
1-Ethylpropylaminacridine

NOTES

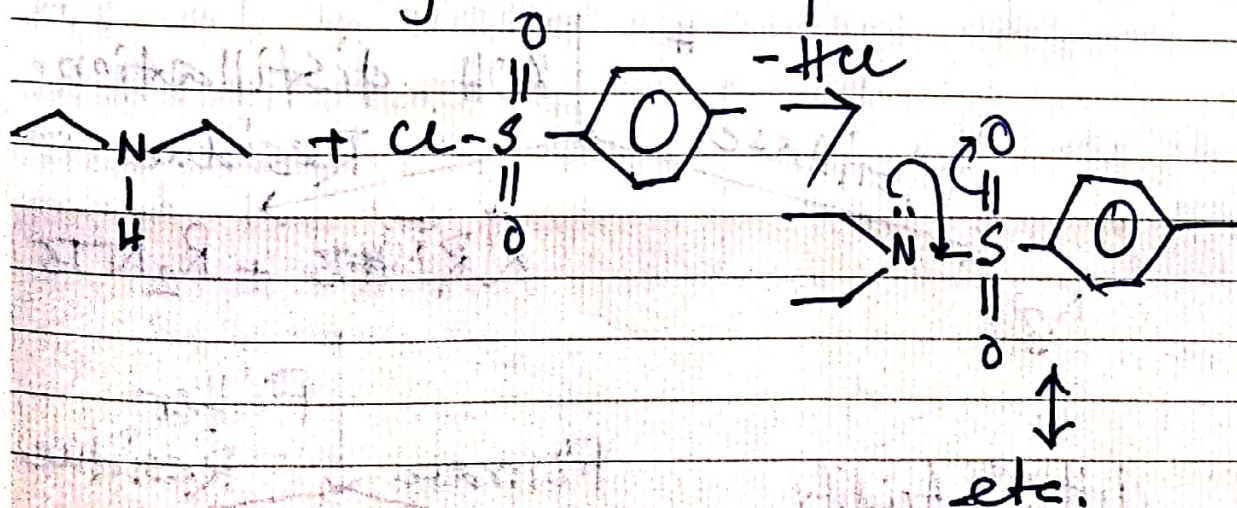
Identification/Separation:

Hinsberg test:

(i) 1° amines form alkali soluble sulphonamides.



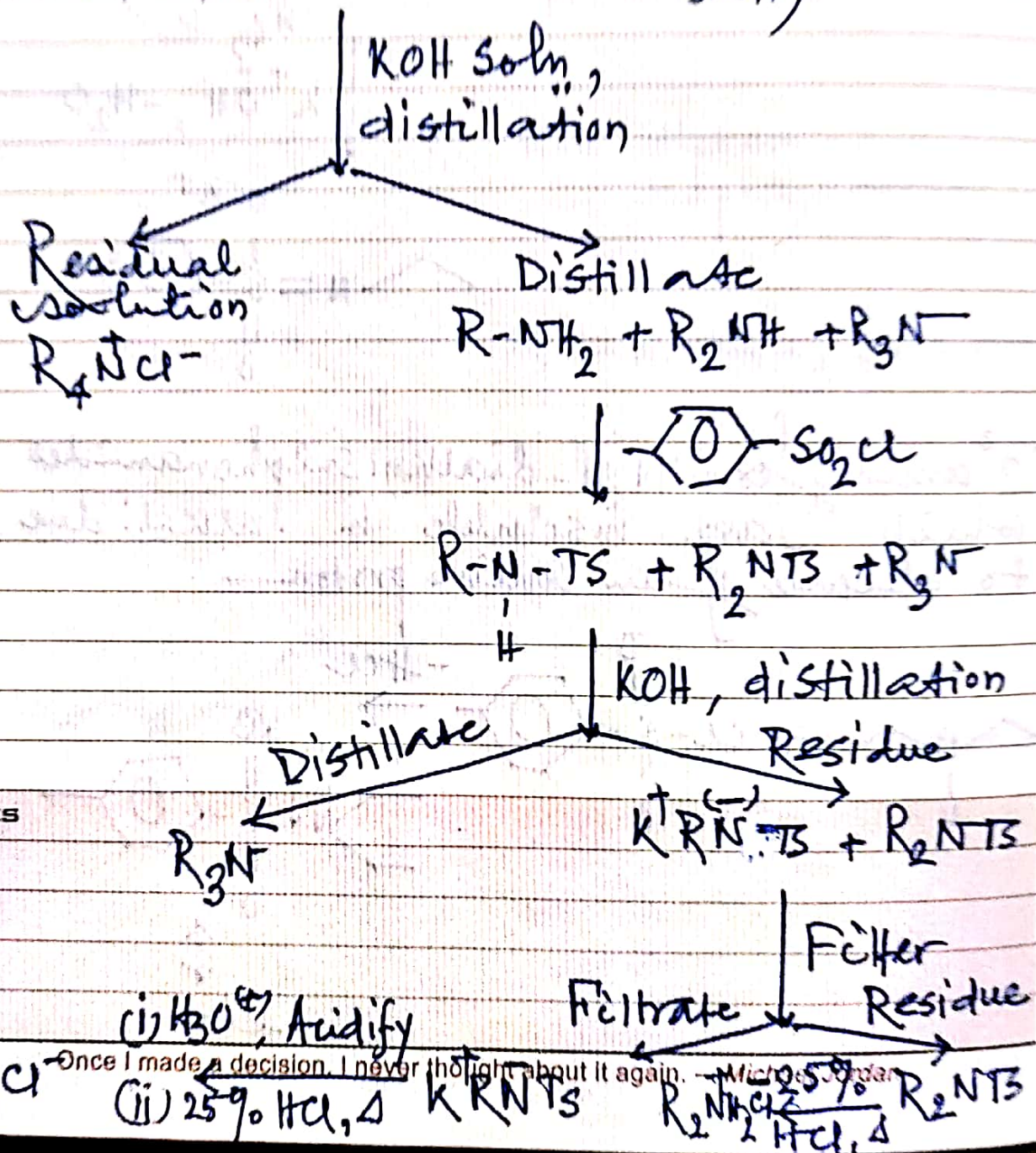
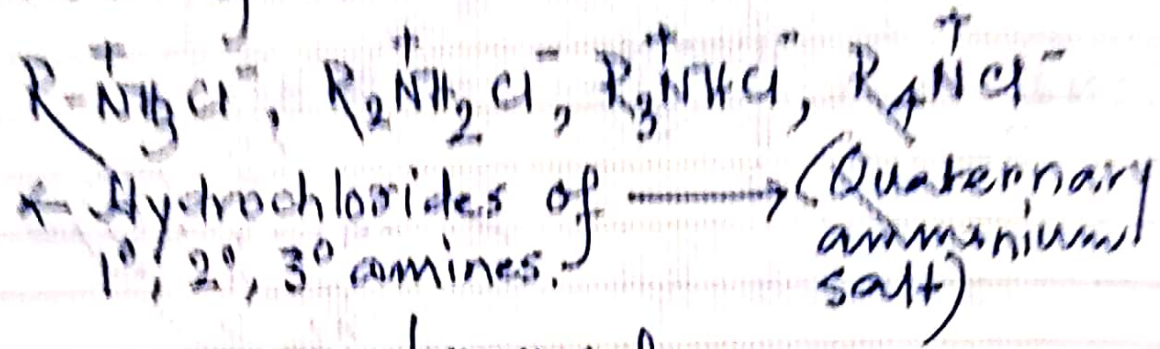
(ii) 2° amines form N,N-dialkylsulphonamides which are insoluble in alkali due to absence of an amino proton.



NOTES

(iii) 1^o amines do not form sulphanamides with Thyl chloride.

Separation of a mixture:



NOTES

Once I made a decision, I never thought about it again.

— M. J. C. Jordan