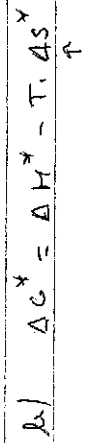
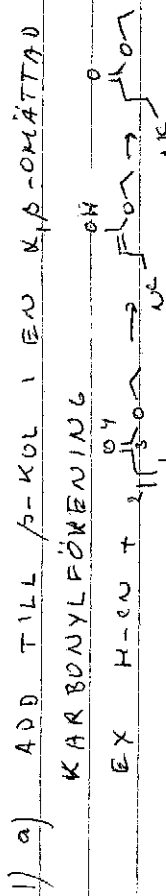


(KORTFATTADE)

FÖRSLAG PÅ SVAR

TILL TENTAN FKI, ORGANISK KEMI

03.06.04



ENTALPI FÖRÄNDRING FRÅN REAKTANTER

TILL TRANSITION STATE

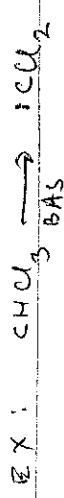
EX:  $\Delta S^\ddagger$  OFTA MINUS I INTRAMOLEKYLÄRA REAKTIONER

c) STUDIE AV CN PÅ FRISKA FRIVILLIGA

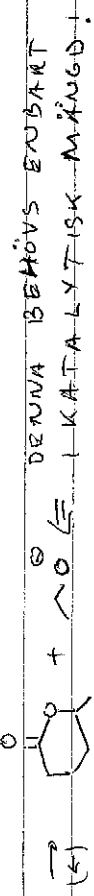
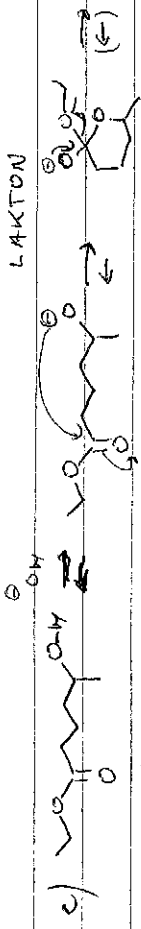
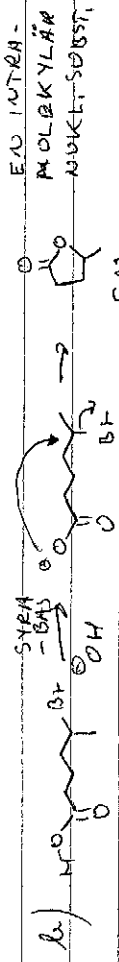
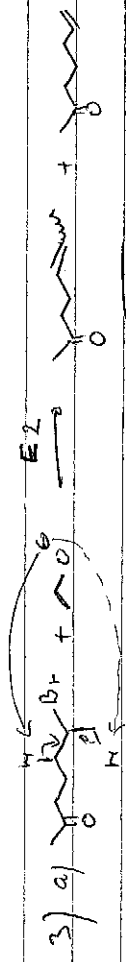
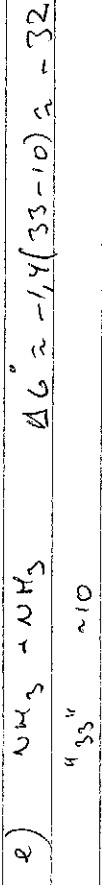
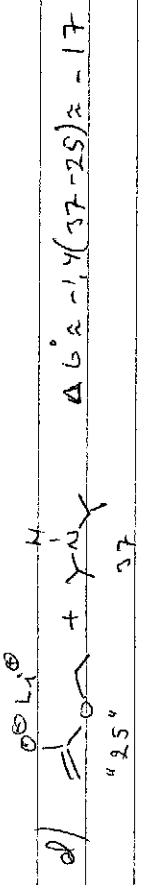
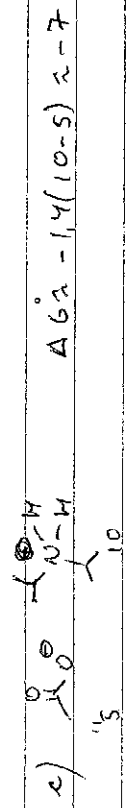
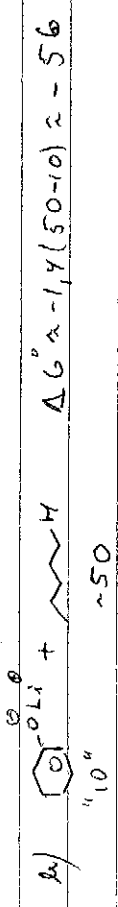
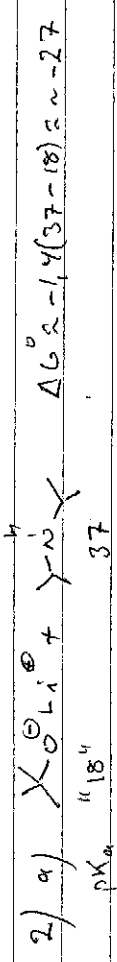
FÖR ATT T. EX. TA FRAM BIVERKANSPROFIL

d) NEUTRALT KOL, OMGIVET AV TOTALT

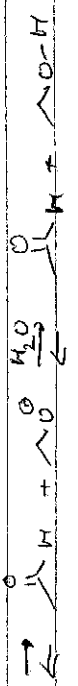
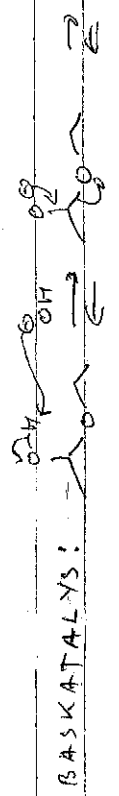
6 VALENSBLENKORNER.



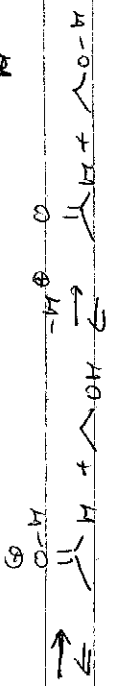
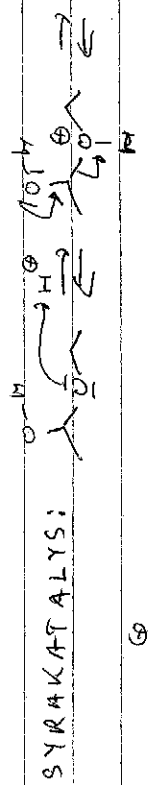
e) ETT ELEKT RUM PÅ SOM INTERAGERAR MED EN NÄRBLÄGEN  $\pi^*$ -ORBITAL OCH



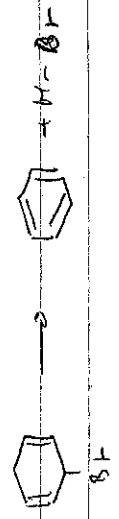
4) a) HALVALETAL (OFTAST INSTABILA)



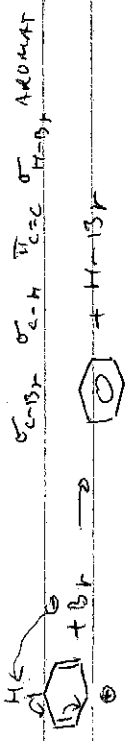
$\Delta H \approx -90 + 86 \approx -4$  (EJ MÄNSYN TAGEN)  
 $\pi_{C=O} \sigma_{C-O}$  TILL ANOMEREFFEKT)



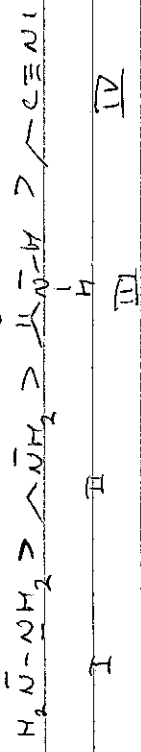
b) AROMATISERAS OÖNHÖRLIGEN



VIA  $\downarrow \uparrow$   $\Delta H \approx 68 + 99 - 63 - 87 - 36 \approx -19 \text{ kcal/mol}$

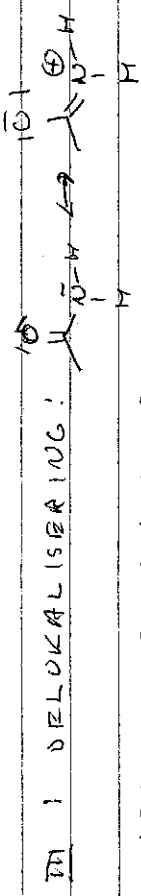


5)



I:  $sp^3$ , 2 ST FRIA ELEKTRONPAR, DVS  
 DESSA KOMBINERAR TILL KOMBINATIONEN  
 EN BINDANDE (LÄGRE ENERGI) OCH EN ANTIBIN-  
 DANDE (HÖGRE ENERGI)

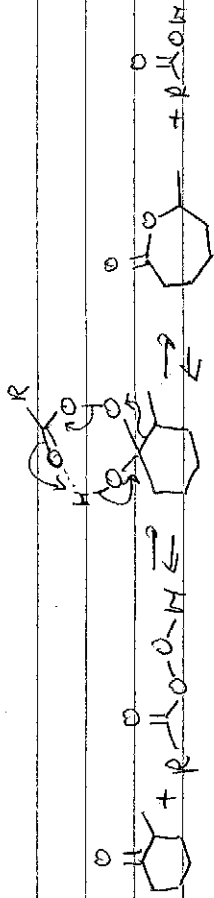
II:  $sp^3$



DESSA STABILISERAR MED  
 AKTIVINGSVÄRDA 17-18 kcal/mol

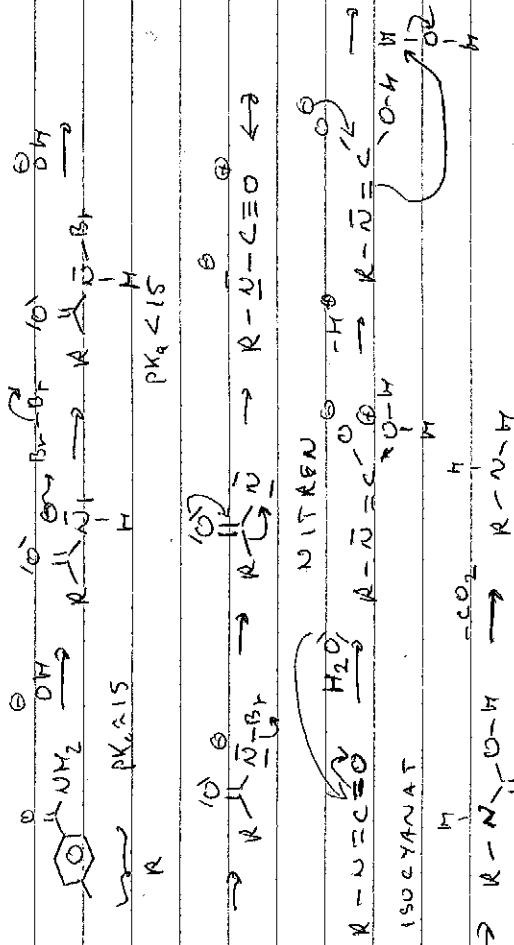
IV:  $sp$

6) a) BAYER-VILLIGER OMLÄGNING

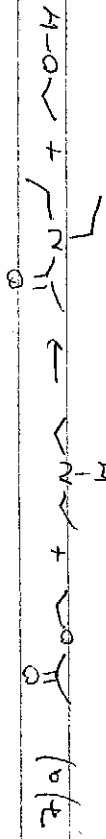


NOTERA: SEC. ALKYL MER MIGRERINGS-  
BENÄGEN ÄR PRIM.

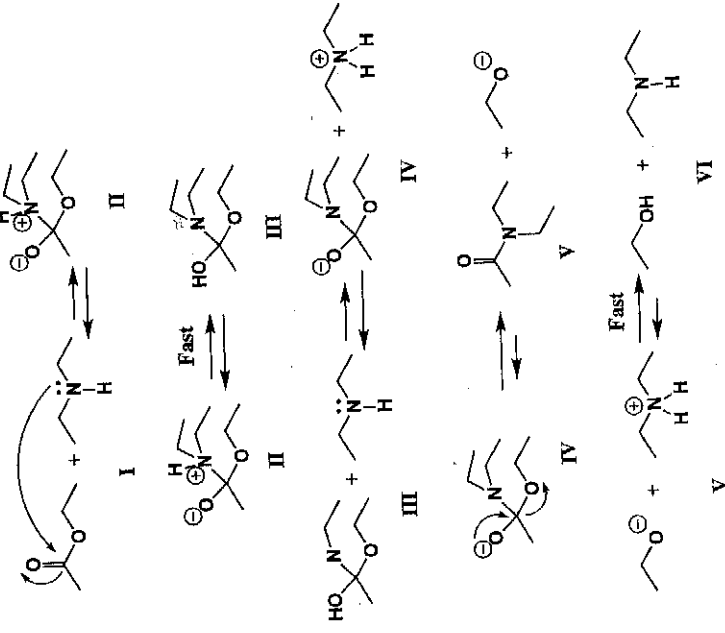
b) HOFMANN OMLÄGNING



KARBAMIN-  
SYRA



$\Delta H_A: 93 + 86 + 7 - 73 - 103 - 17 = -7$



$\Delta H_{I-II}: 93 + 93 + 7 - 103 - 73 = -7$

$\Delta G_{II-III}: -14(10-16) = +8$

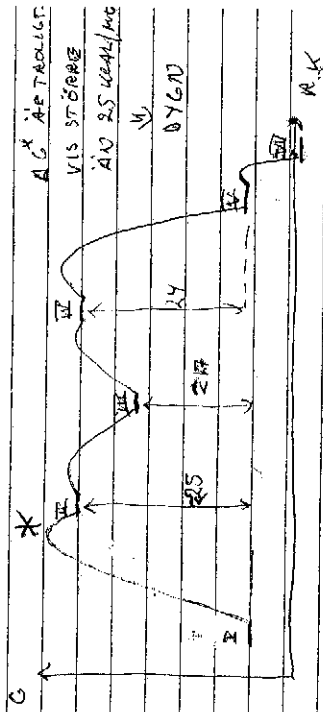
$\Delta H_{II-III} = \Delta H_{I-II} + \Delta G_{II-III} = -7 + 8 = +1$

$\Delta G_{III-IV} = -14(10-16) = +8$

$\Delta H_{III-IV} = +86 - 93 - 17 = -24$

$\Delta G_{IV-V} = -14(16-10) = -8$

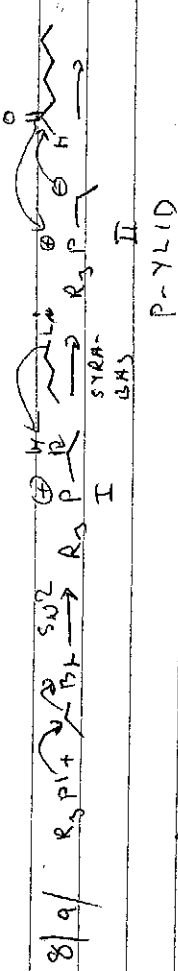
REAKTIONSPROFIL  
(AMLI MODULS)



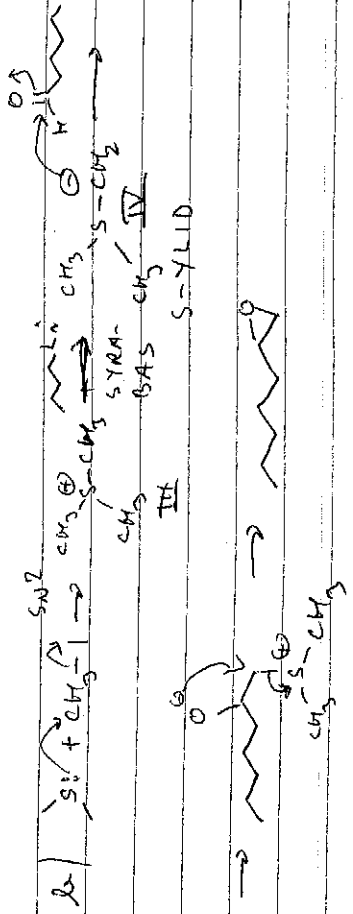
AL<sup>+</sup> ÄRTADIGT  
VIS STÖRRE  
ÄR 25 UPPÅNG  
↓  
BYGAD

A: I → II RATE DETERMINING STEP

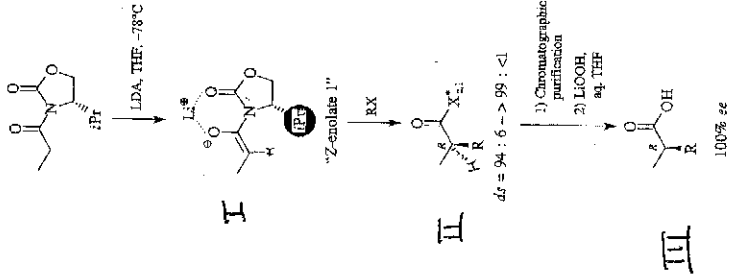
\* SLUTSATS: DET TAR EN STUND



CIS-OXAFOSEFAN Z-2-OKTEAN (MEST)



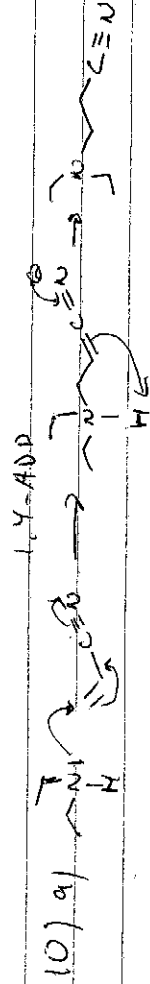
9) a) b) c) d)

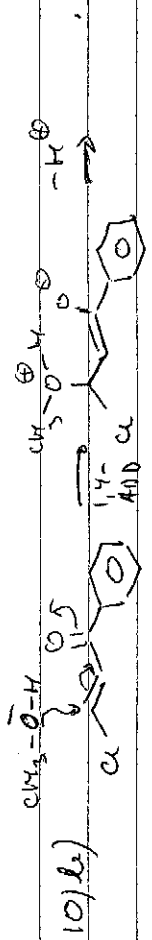


d) I. STARK BAS KAN RACEMISERA  $\alpha$ -KOLET

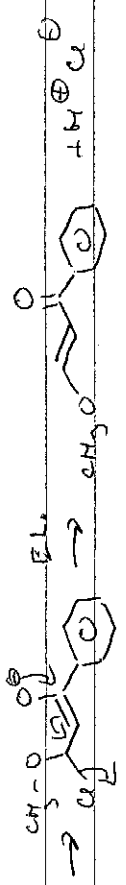
II. LI KOORIDERAR O I KARBONYL OVS AKTIVERAR

III. H-O<sup>-</sup> BÄTTRE UN ÄN H<sup>+</sup>





"VINYLLOG SYRA-  
KLORID"



11) a) I.T.S.U II CN

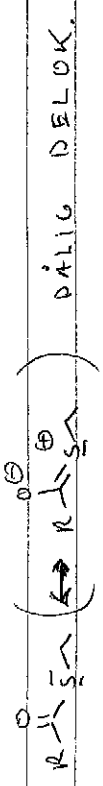
b) OH, H<sub>2</sub>O, Δ

c) ETTERAN KAN SPRICKA (SÅ) ALT. EI)

d) H<sup>+</sup>

e) B<sub>2</sub>H<sub>6</sub>; ALT SOCl<sub>2</sub> + N

12) a) C-S-AVSTÅND LÄNGRE ÄN C-O ⇒



b) ANOMER EFFEKT

