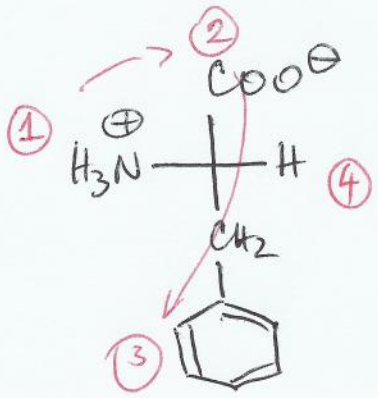
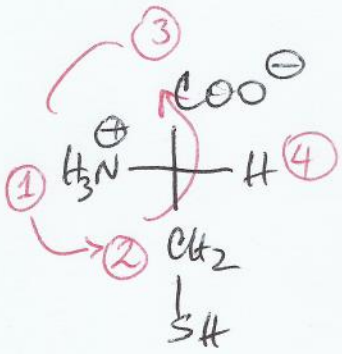
AMINOKISELINE, PEPTIDI I PROTEINI

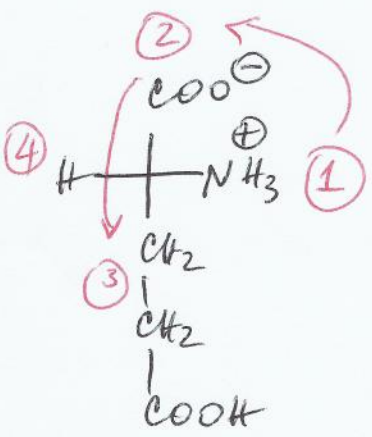
ZADATAK – 5. slajd



L – Phe
S – konfiguracija



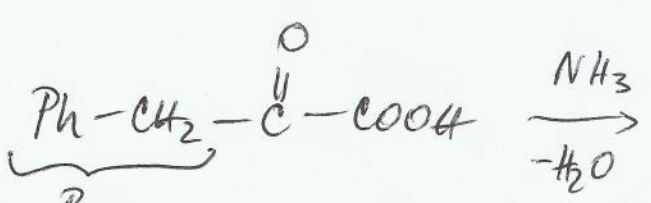
L – Cys
R



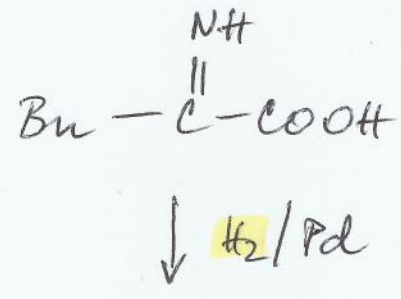
D – Glu
R

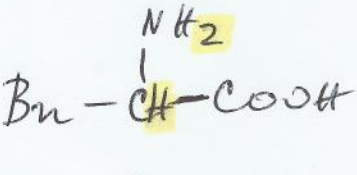
→ vidimo da ne vrijedi uvijek L = S ili D = R

ZADATAK – 14. slajd



Bn (benzil)



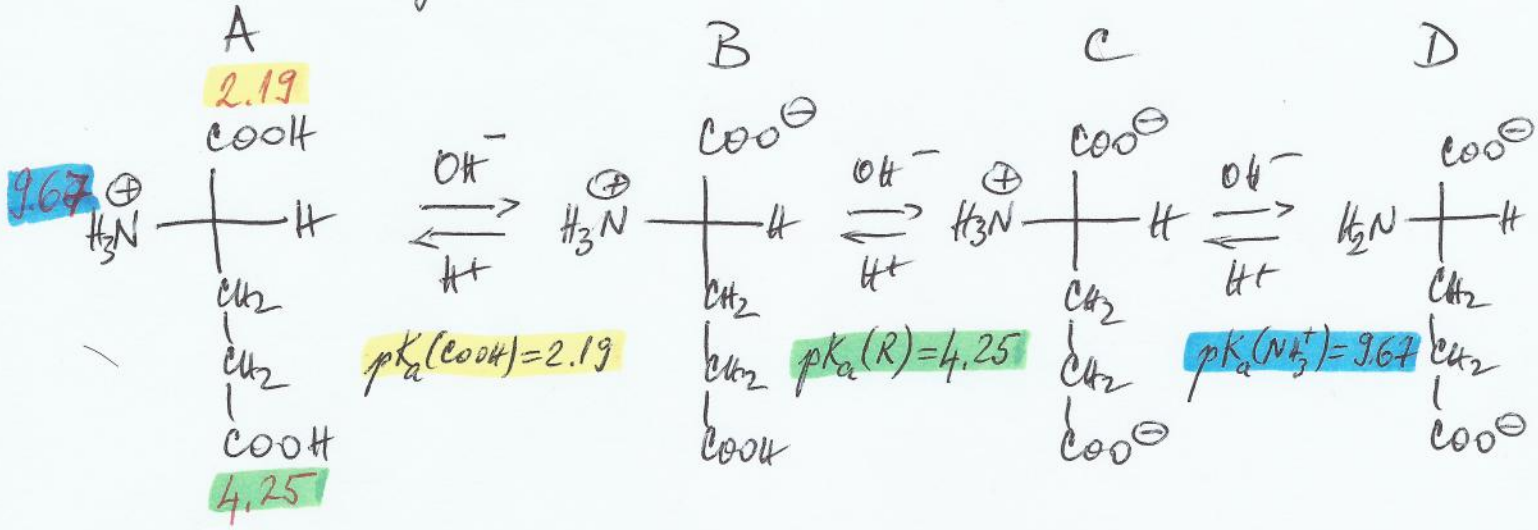


DL – Phe

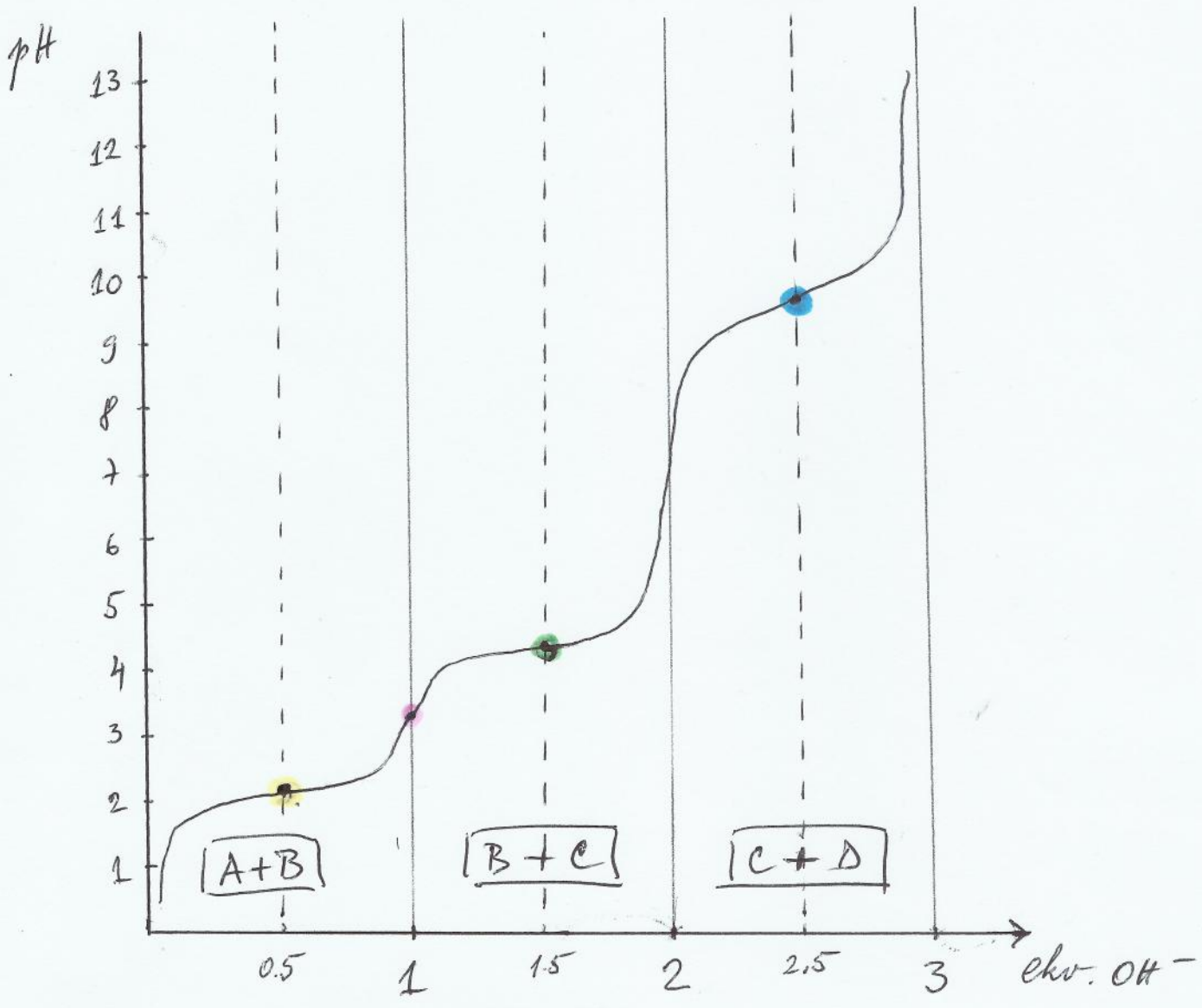
↓

racemat, može se označiti i s (±)

ZADATAK – slajd 11



$$pI = \frac{pK_a(COOH) + pK_a(R)}{2} = \frac{2.19 + 4.25}{2} = 3.22$$



ZADATAK – 42. slajd

$$A \xrightarrow[90\%]{B} AB \xrightarrow[90\%]{C} ABC \xrightarrow[90\%]{D} ABCD \xrightarrow[90\%]{E} ABCDE \xrightarrow[90\%]{F} ABCDEF$$

$$\eta_{ukupno} = (90\%)^5 = 0.9^5 = 0.59 = 59\%$$

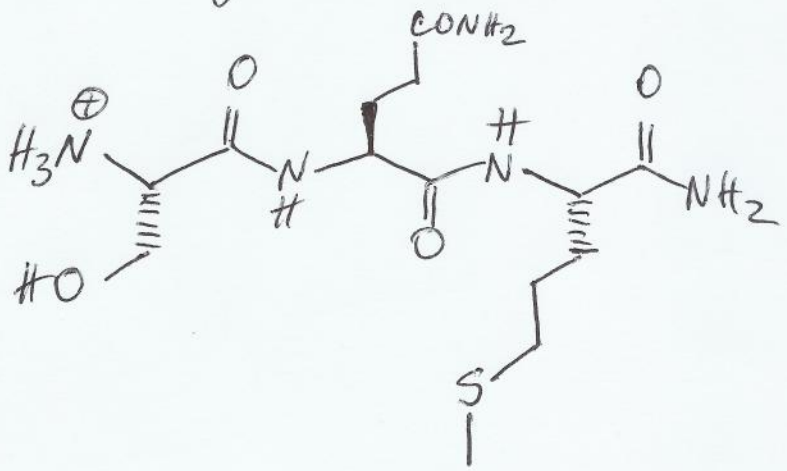
$$A \xrightarrow[90\%]{B} AB \xrightarrow[90\%]{C} ABC \xrightarrow{90\%} ABCDEF$$

$$D \xrightarrow[90\%]{E} DE \xrightarrow[90\%]{F} DEF$$

$$\eta_{ukupno} = (0.9)^3 = 0.73 = 73\%$$

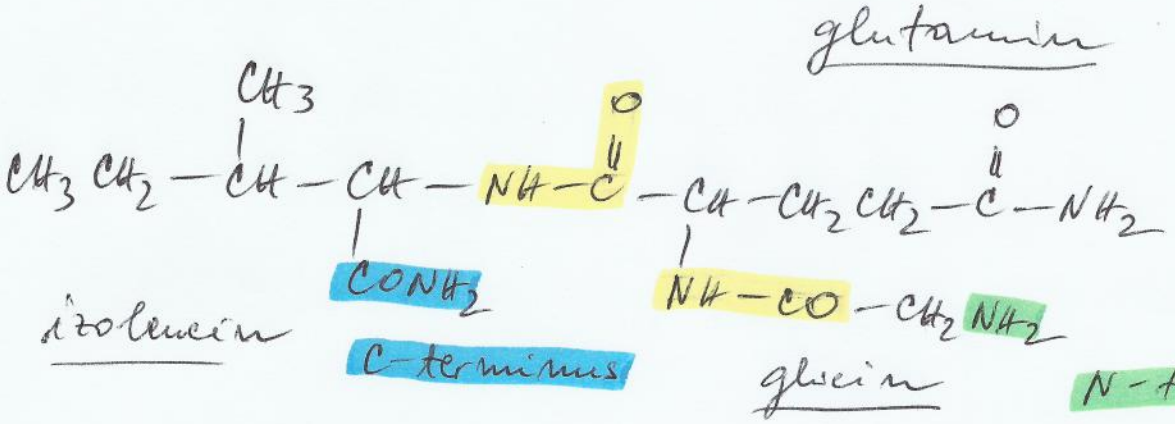
ZADATAK – slajd 49

(1.) Ser – Gln – Met – NH_2



ZADATAK – 49. slajd

(2.)

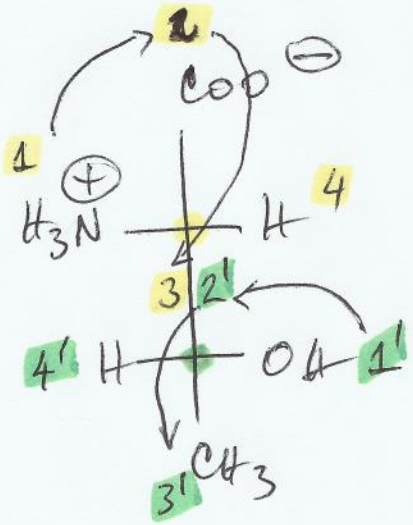


= peptidne veze

H – Gly – Gln – Ile – NH_2

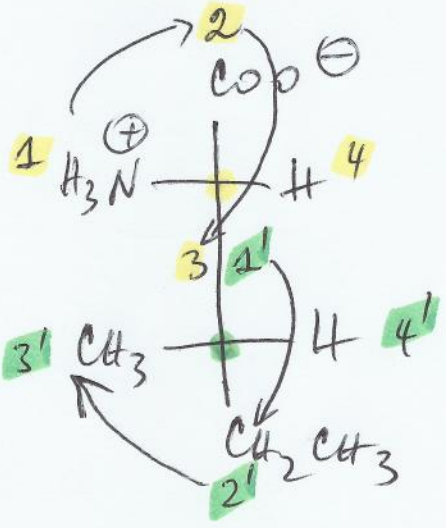
DOMAĆA ZADAĆA

(1.) L – treonin



(2S, 3R)

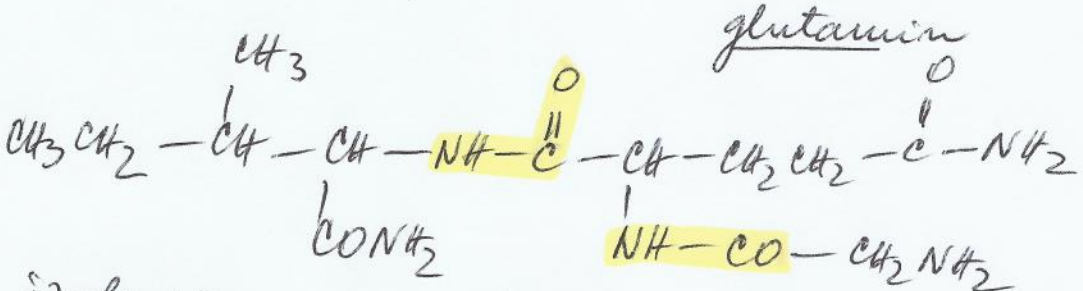
L – izoleucin



(2S, 3S)

ZADATAK – 49. slajd

(2.)

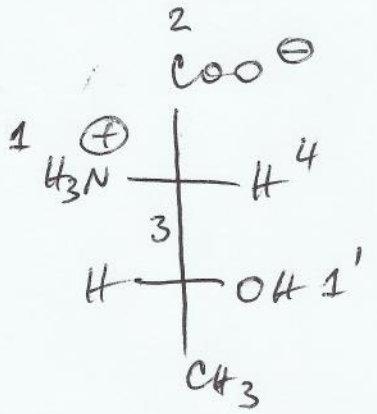


= peptidne veze

H – Gly – Gln – Ile – NH_2

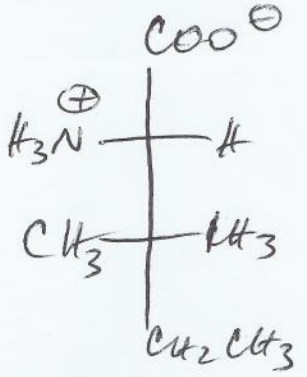
DOMAĆA ~~ZADAĆA~~

(1.) L-treonin



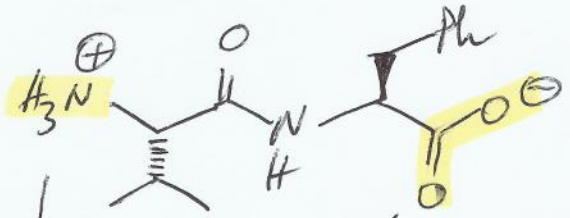
(2S, 3R)

L-izolecin

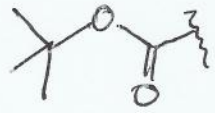


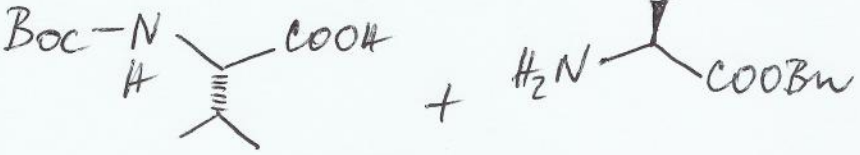
(2S, 3S)

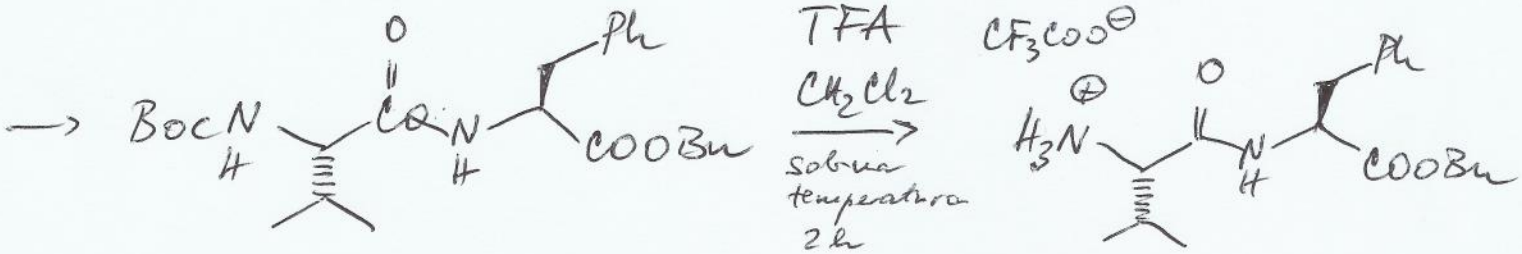
(2.) Cilj: H-L-Val-L-Phe-OH

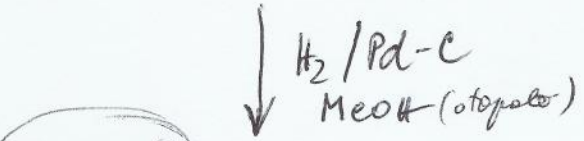


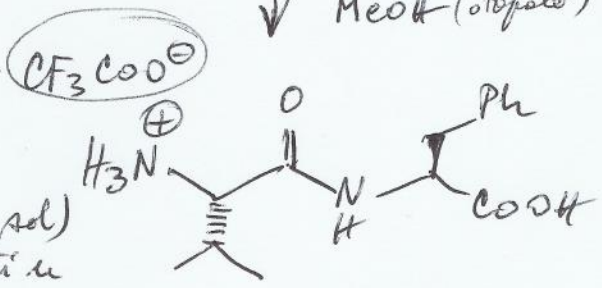
moraju biti zaštićene za vrijeme reakcije

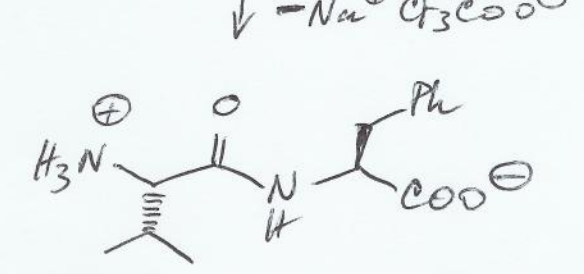
Boc- = 



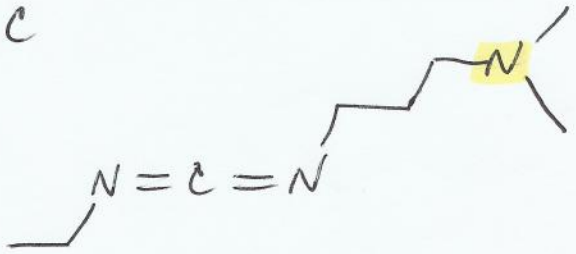








EDC

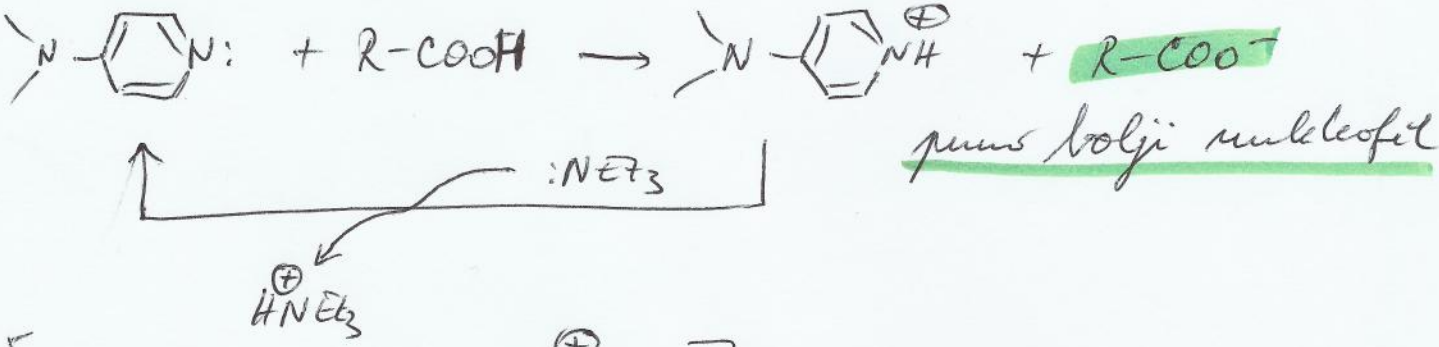


- ista uloga kao DCC
- lakše uklanjanje nakon što je reakcija gotova → N se može protonirati pa se ekstrakcijom prevede u vodeni sloj, dok zaštićeni peptid ostaje u organskom

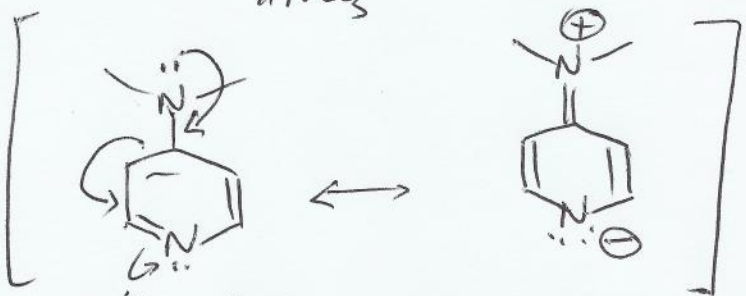
DMAP + TEA = baze u reakciji

↓ katalitička količina

↓ 2–3 ekv.



puno bolji nukleofil



$pK_a = 9.6$ → puno jača baza od piridina

$pK_a = 5.25$