

ADI VE SOYADI:

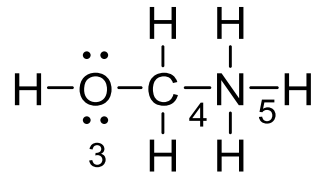
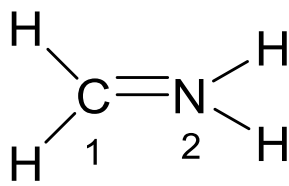
NO:

2014-2015 GÜZ YARIYILI MBG ORGANİK KİMYA 1. VİZE SINAVI
30.10.2014

SINAV HAKKINDA BİLGİ: Her soru (10 puan) ; Süre: 60 dak.

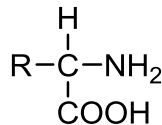
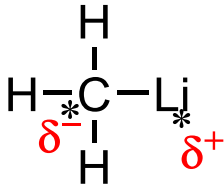
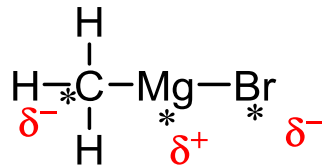
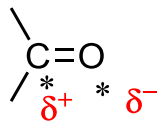
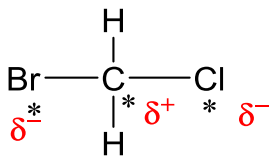
SORULAR

- 1)Aşağıdaki formüllerde H hariç diğer atomların a) formal yükünü
b)hibritleşmesini yazınız. (C: IVA, N: VA, O: VIA)

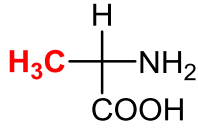


	Formal Yük	Hibritleşme
C-1	0	sp ²
N-2	+1	sp ²
O-3	0	sp ³
C-4	0	sp ³
N-5	+1	sp ³

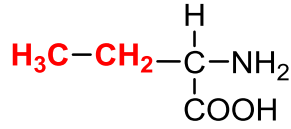
- 2)Aşağıdaki işaretli atomların $-\delta$ ve $+\delta$ yükleri üzerlerine yazınız.



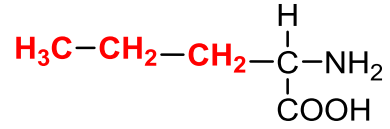
- 3) Amino asitler formülüyle gösterilir. Aşağıdaki amino asitlerin R gruplarının adını yazınız.



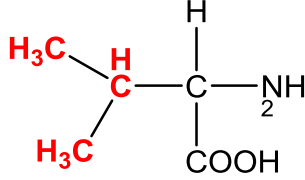
Metil grubu



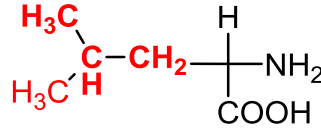
Etil grubu



Propil grubu

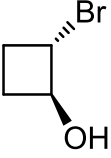
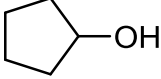
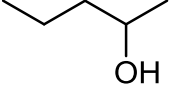


İzopropil

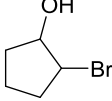
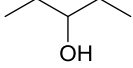


izobutil

B) Aşağıdaki bileşiklerin IUPAC isimlerini yazınız.

$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_3$ İsim: n- Pentan	$\begin{array}{c} \text{H}_3\text{C}-\text{CH}_2-\text{CH}-\text{CH}_2-\text{Br} \\ \\ \text{Br} \end{array}$ İsim: 1, 2-dibrombütan
 İsim: (trans) 2-brom-1-siklobütanol	 İsim: Siklopentanol
 İsim: 2-pentanol	

4) Aşağıdaki alkol ve alkol halojenürleri primer,sekonder ve tersiyer olarak sınıflandırınız.

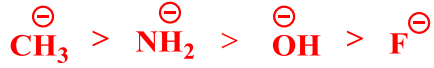
- a)  **tert-alkol**
- b) $\begin{array}{c} \text{CH}_3 \\ | \\ \text{H}-\text{C}-\text{CH}_3 \\ | \\ \text{OH} \end{array}$ **sec-alkol**
- c) $\text{H}_3\text{C}-\text{C}(\text{CH}_3)_2-\text{CH}_2-\text{OH}$ **primer alkol**
- d)  **sec-alkol/**
- e)  **sec-alkol**
- sec-alkil halojenür**

5) Asitlik yönünden $\text{CH}_4 < \text{NH}_3 < \text{H}_2\text{O} < \text{HF}$ olduğuna göre ;

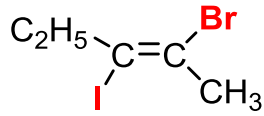
a) her bir HX asidinin eşlenik bazını yazınız.

Asit	CH ₄	NH ₃	H ₂ O	HF
Eşlenik baz	CH_3^-	NH_2^-	OH^-	F^-

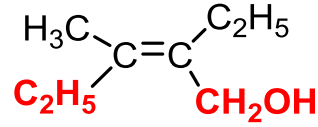
b) Bazların kuvvetliden zayıfa doğru sıralamasını yapınız.



6) Aşağıdaki alkenlerin her bir alken C 'una bağlı grubun öncelik sırasını yuvarlak içinde göstererek alken konfigürasyonunu (E) , (Z) olarak belirleyiniz.

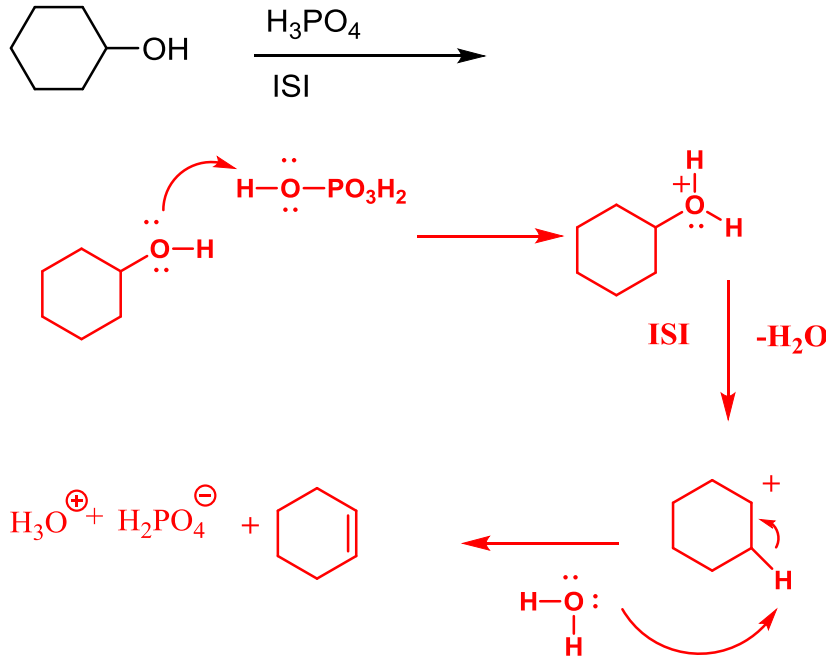


(E) Konfigürasyonu

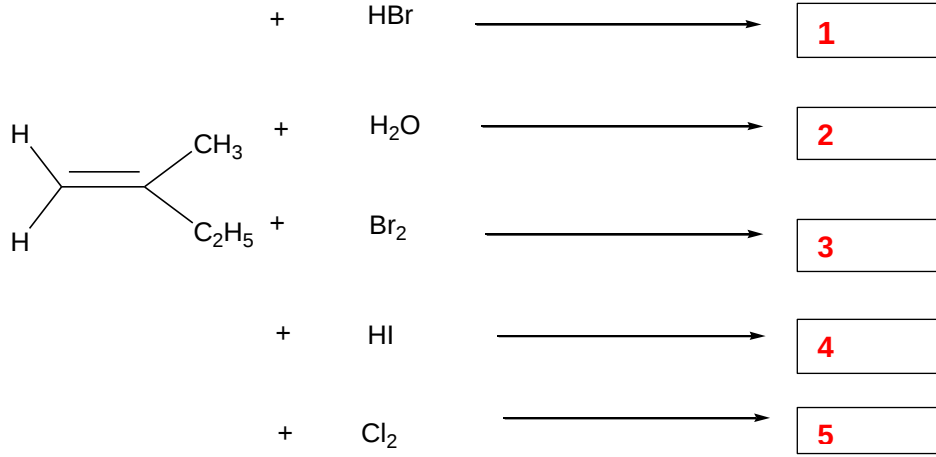


(Z) Konfigürasyonu

7) Aşağıdaki tepkimeden bir su molekülü çıkmaktadır.Tepkime sonucunda oluşan ürünler ve tepkime mekanizmasını yazınız.

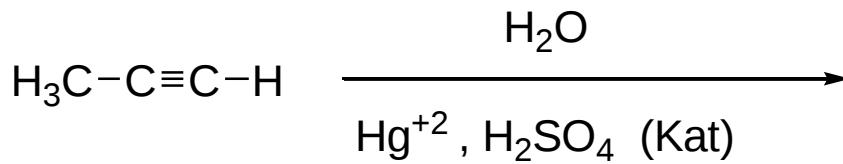


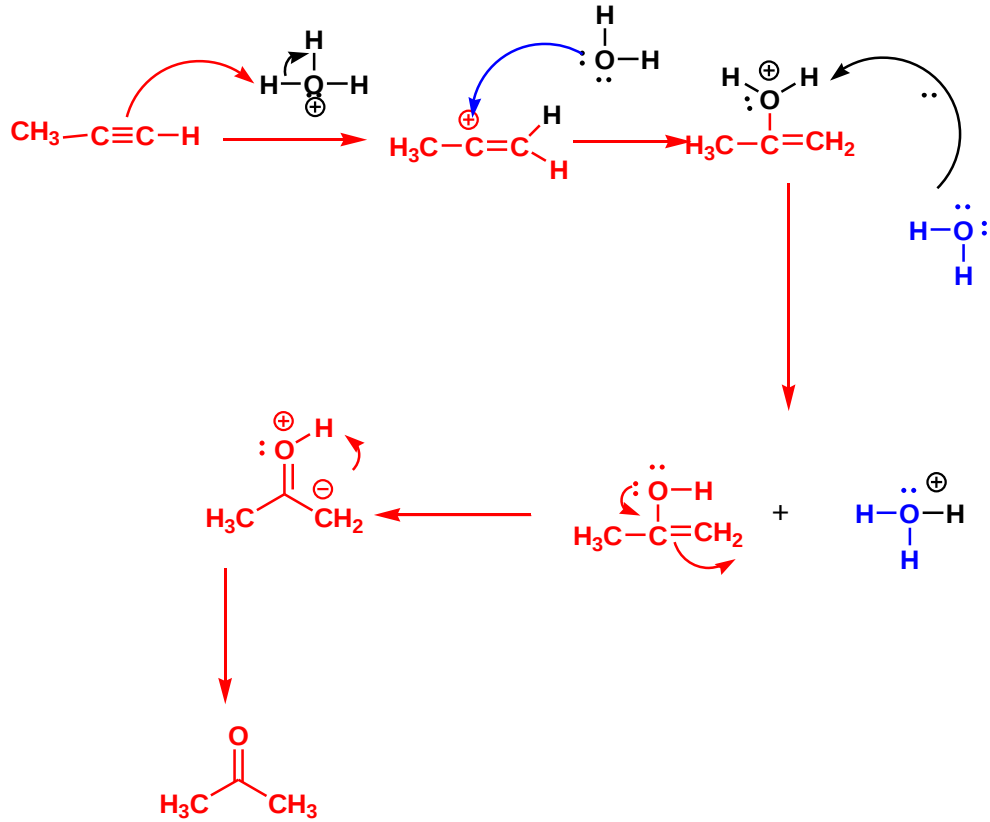
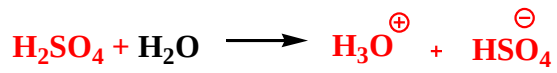
8) Aşağıda verilen reaksiyonlarda oluşacak ana ürünü yazınız.



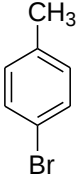
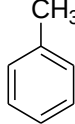
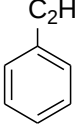
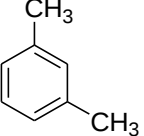
1	2	3	4	5
$\begin{array}{c} \text{H} \\ \diagdown \\ \text{H}-\text{C}-\text{C}-\text{Br} \\ \diagup \\ \text{H} \end{array}$	$\begin{array}{c} \text{H} \\ \diagdown \\ \text{H}-\text{C}-\text{C}-\text{OH} \\ \diagup \\ \text{H} \end{array}$	$\begin{array}{c} \text{H} \\ \diagdown \\ \text{Br}-\text{C}-\text{C}-\text{Br} \\ \diagup \\ \text{H} \end{array}$	$\begin{array}{c} \text{H} \\ \diagdown \\ \text{H}-\text{C}-\text{C}-\text{I} \\ \diagup \\ \text{H} \end{array}$	$\begin{array}{c} \text{H} \\ \diagdown \\ \text{Cl}-\text{C}-\text{C}-\text{Cl} \\ \diagup \\ \text{H} \end{array}$

9) Aşağıdaki tepkime, bir alkine su katılması tepkimesidir. ürün ve mekanizmasını yazınız.





10) Aşağıdaki bileşikleri adlandırınız.

 Benzen	 4-brom-1-metilbenzen veya p-bromtoluen veya 4-bromtoluen
 Toluen veya metilbenzen	 Etilbenzen veya feniletan
 m-ksilen veya 1,3-dimetilbenzen	