Dr. Hussein sulaiman

1

50

Voice

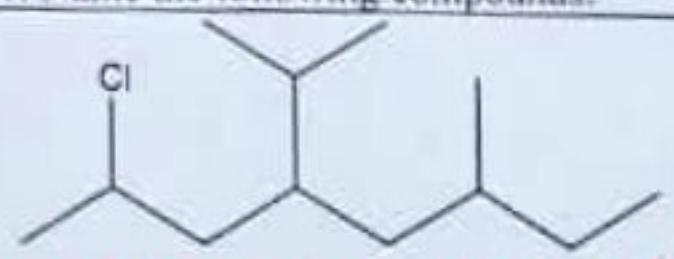
Al-Azhar University -Gaza
Chemistry Department

Midterm exam
Time: 1 hours

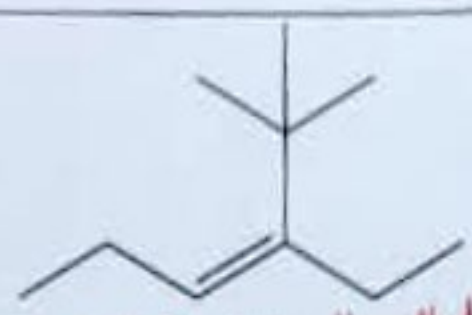
Org. Chem.
2nd semester 21/22
اسم الطالب/ة (باللغة العربية):
اسم المدرس:

6

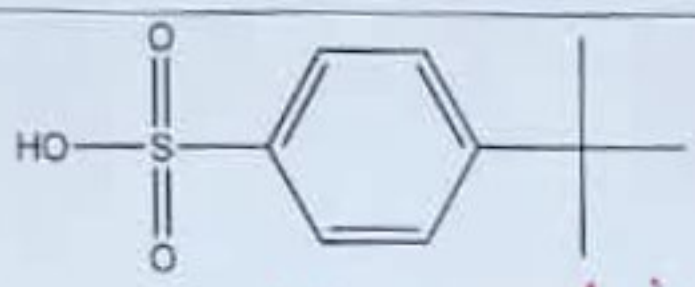
Q1. Name the following compounds:



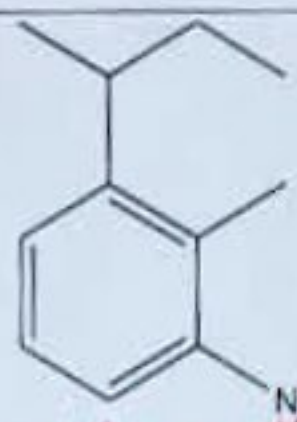
2-chloro-4-isopropyl-6-methyl octane



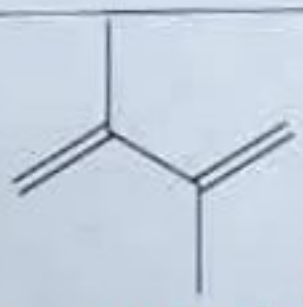
(Z)-3-ethyl-2,2-dimethyl-3-hexene



4-tert-butylbenzenesulfonic acid



1-sec-butyl-2-methyl-3-nitrobenzene



2,3-dimethyl-1,3-butadiene

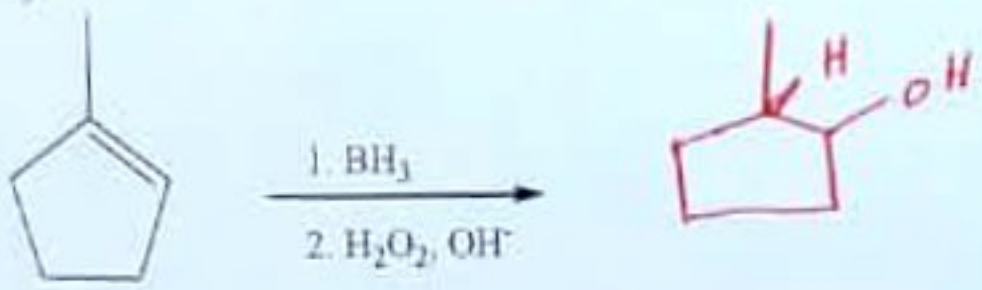
2,6-dimethyl-3-heptyne

/

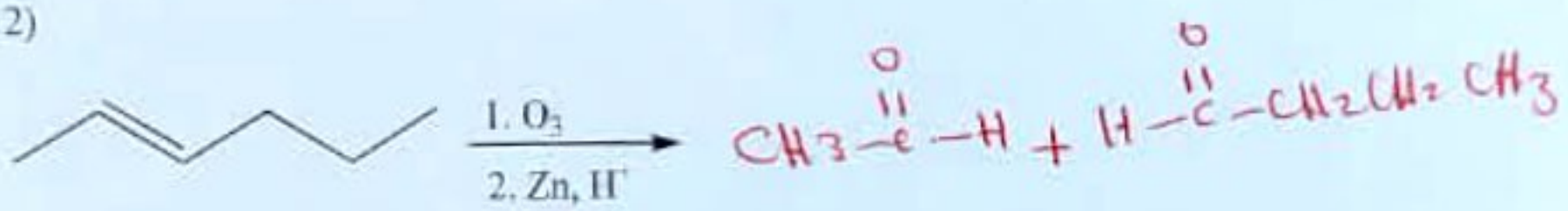
15

Q5. Complete the following reactions: 8+10 = (18)

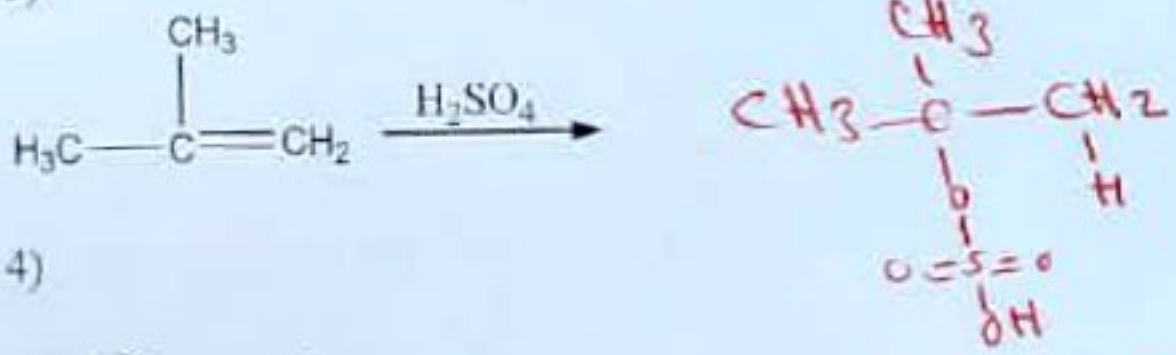
1)



2)

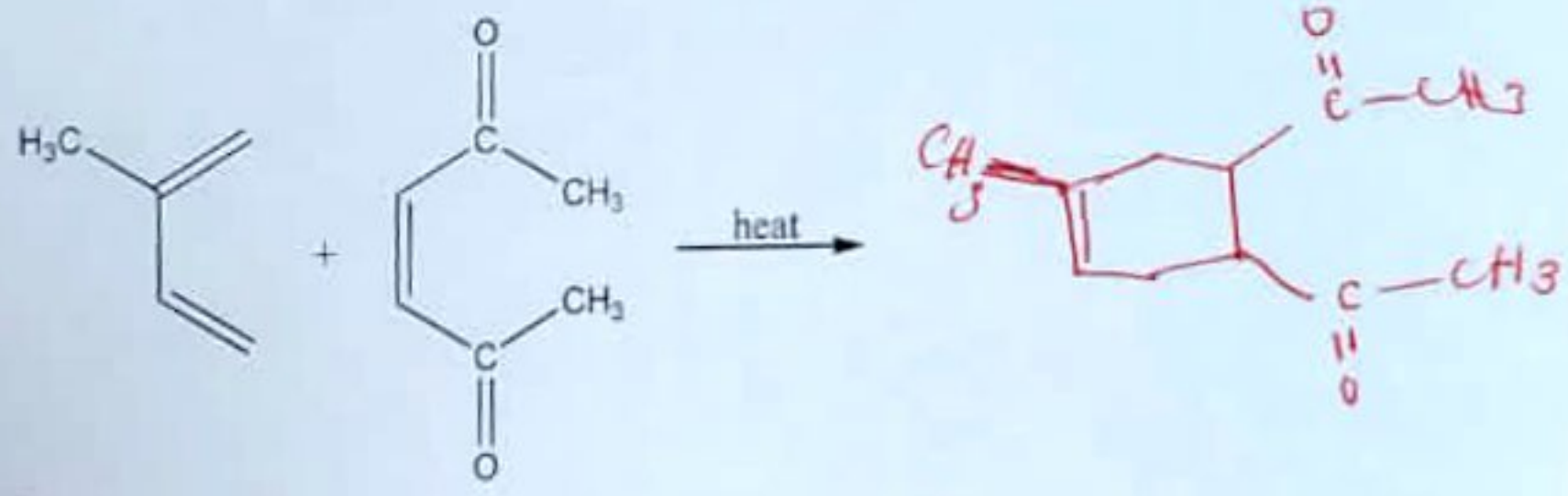


3)

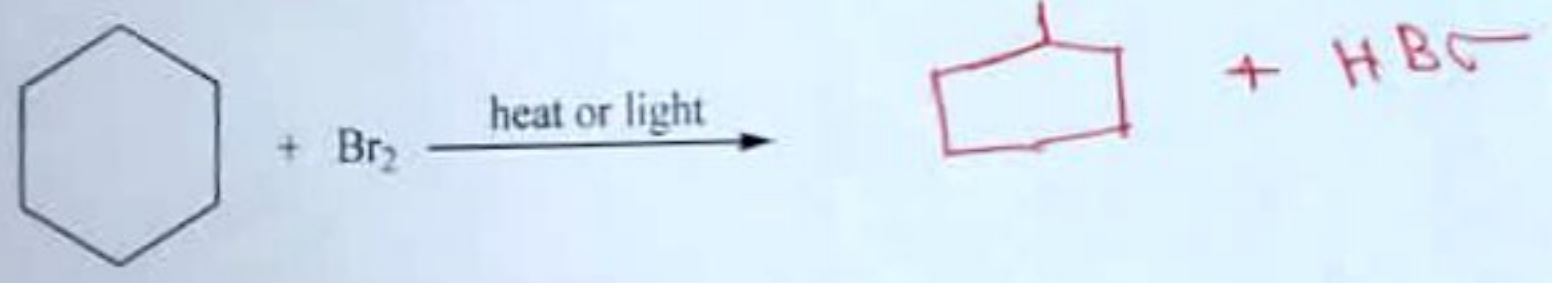


4)

5)

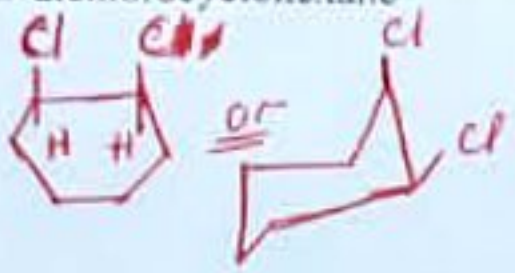
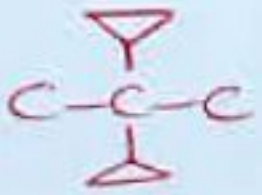
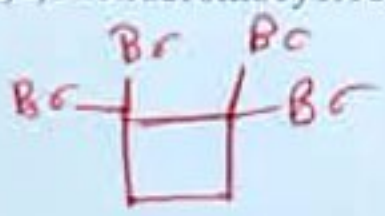
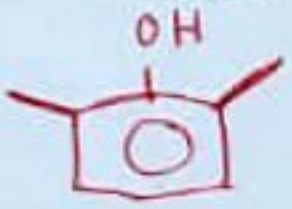
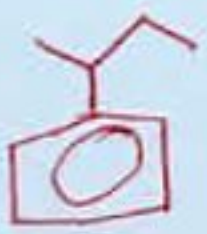


6)



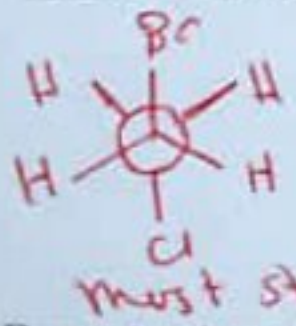
(6)

Q2. Draw the structure of the following compounds:

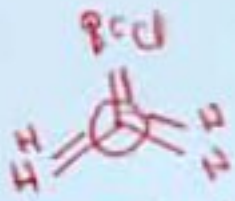
Cis-1,2-dichlorocyclohexane 	3-isopropyl-6-methyl-1-cyclohexene 
2,2-dicyclopropylpropane 	1,1,2,2-tetrabromocyclobutane 
2,6-dimethylphenol 	*sec*-butylbenzene 

(2)

Q3. Using Newman projection formula draw the most and the least stable conformations of 1-bromo-2-chloroethane.



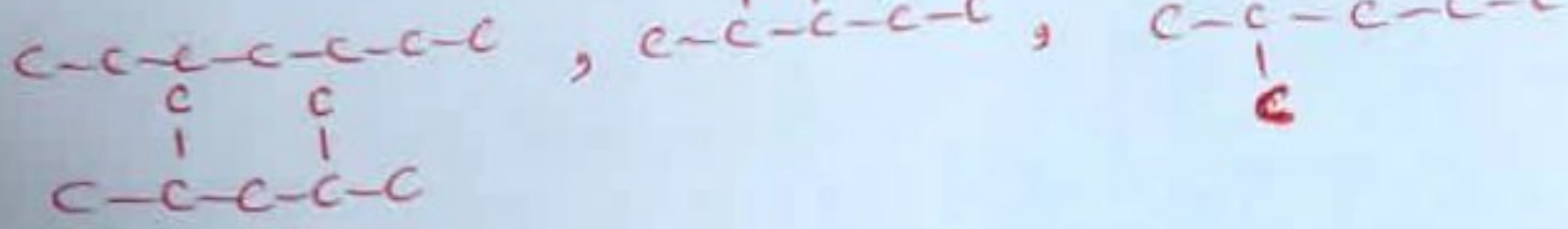
most stable



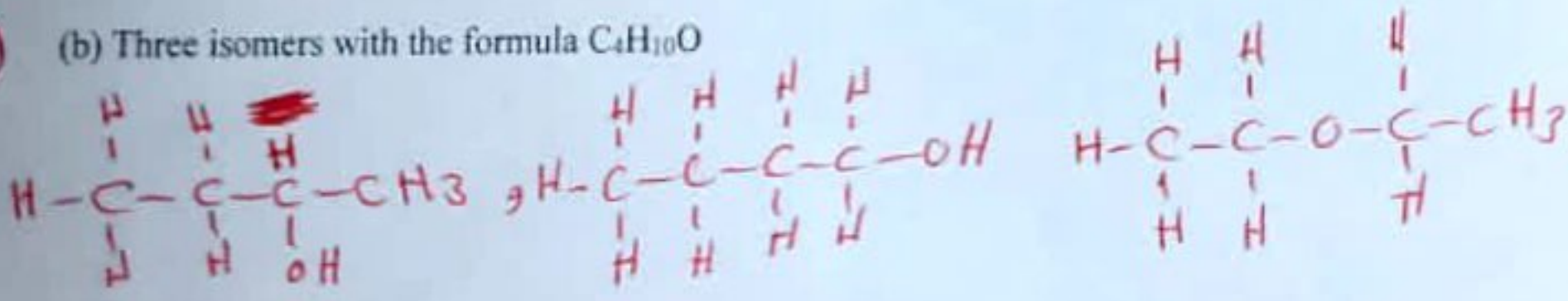
least stable

(4)

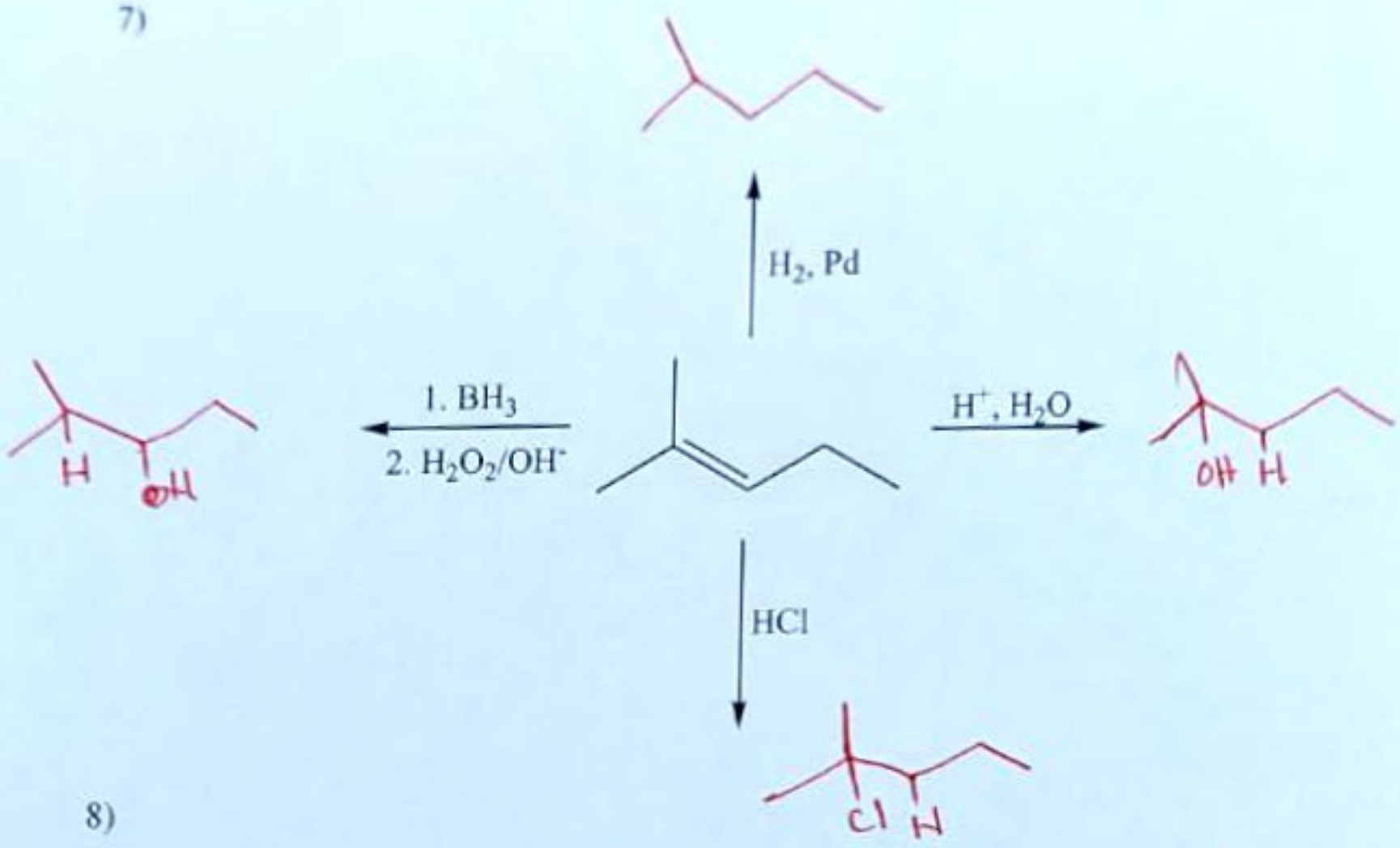
Q4. Draw structures that meet the following descriptions:

(a) Four isomers with the formula C_7H_{16} 

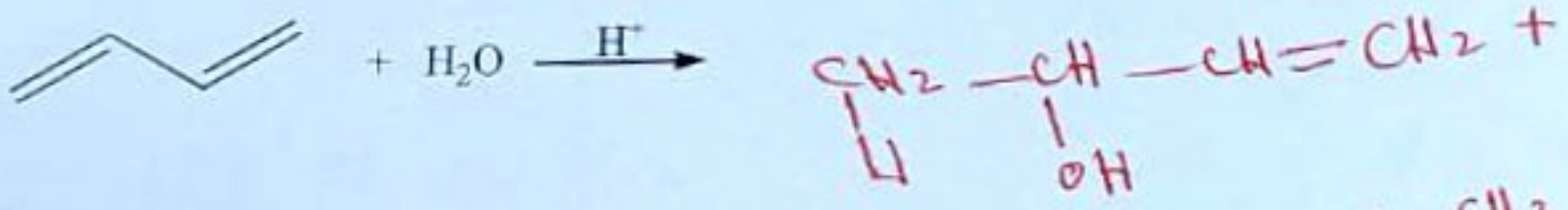
(3)

(b) Three isomers with the formula $C_4H_{10}O$ 

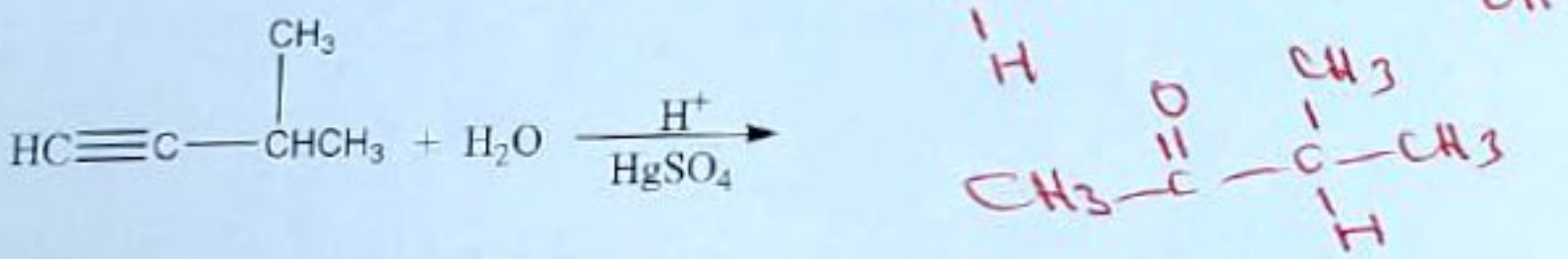
7)



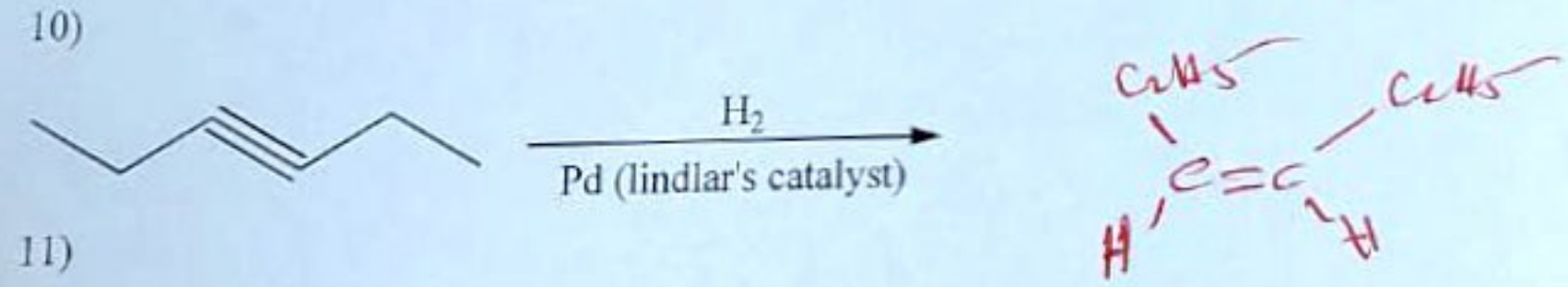
8)



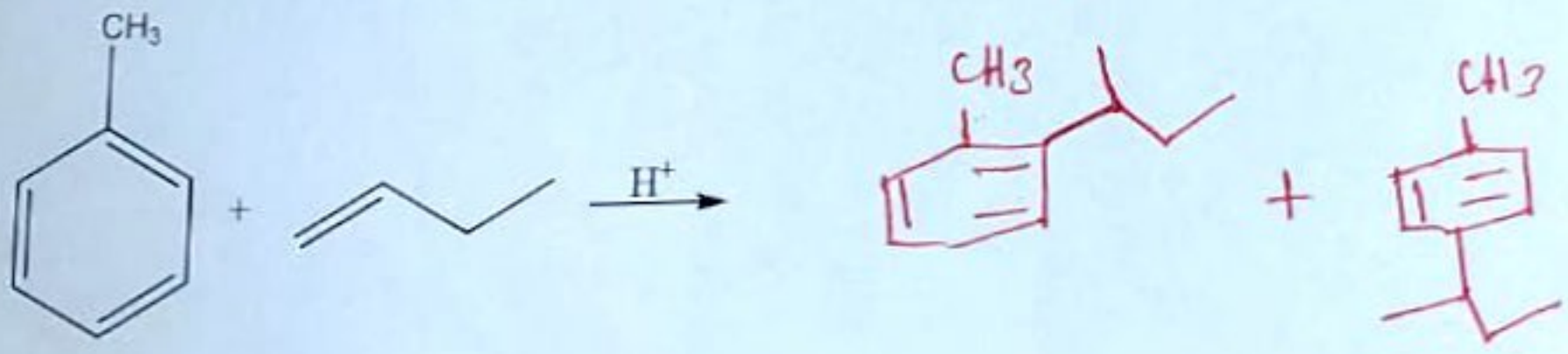
9)



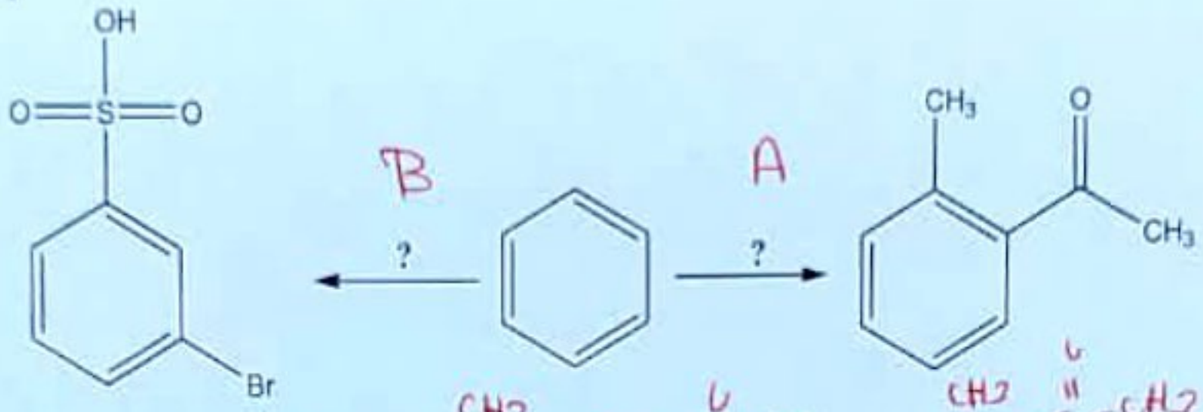
10)



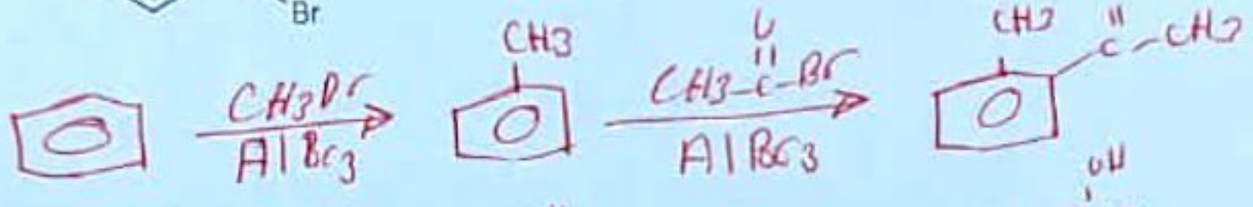
11)



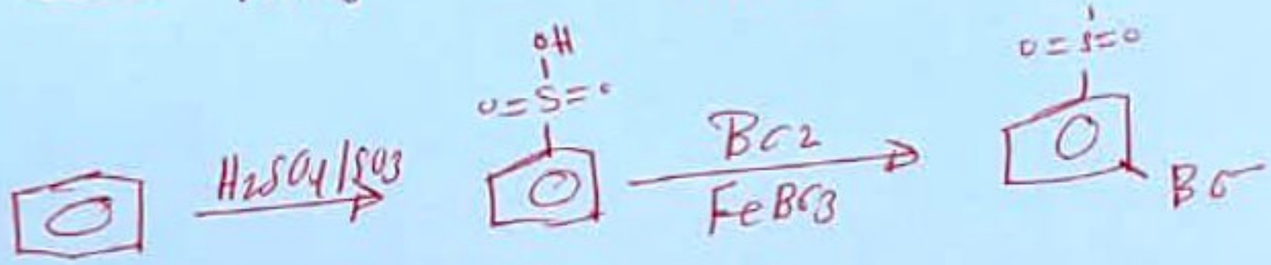
3)



④ A



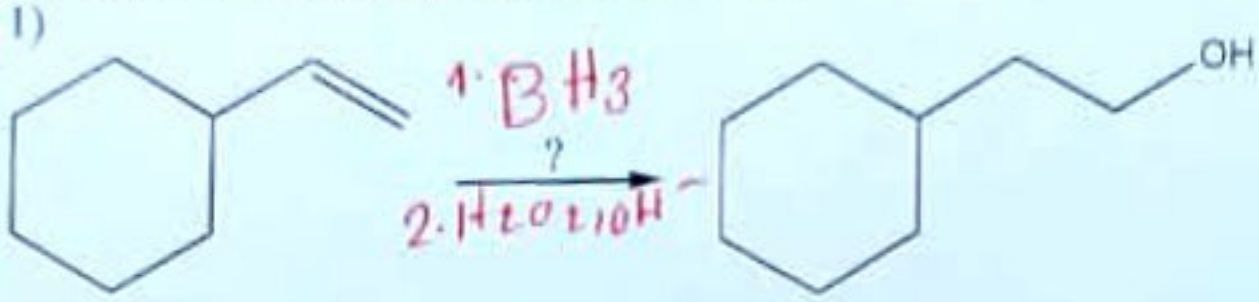
④ B



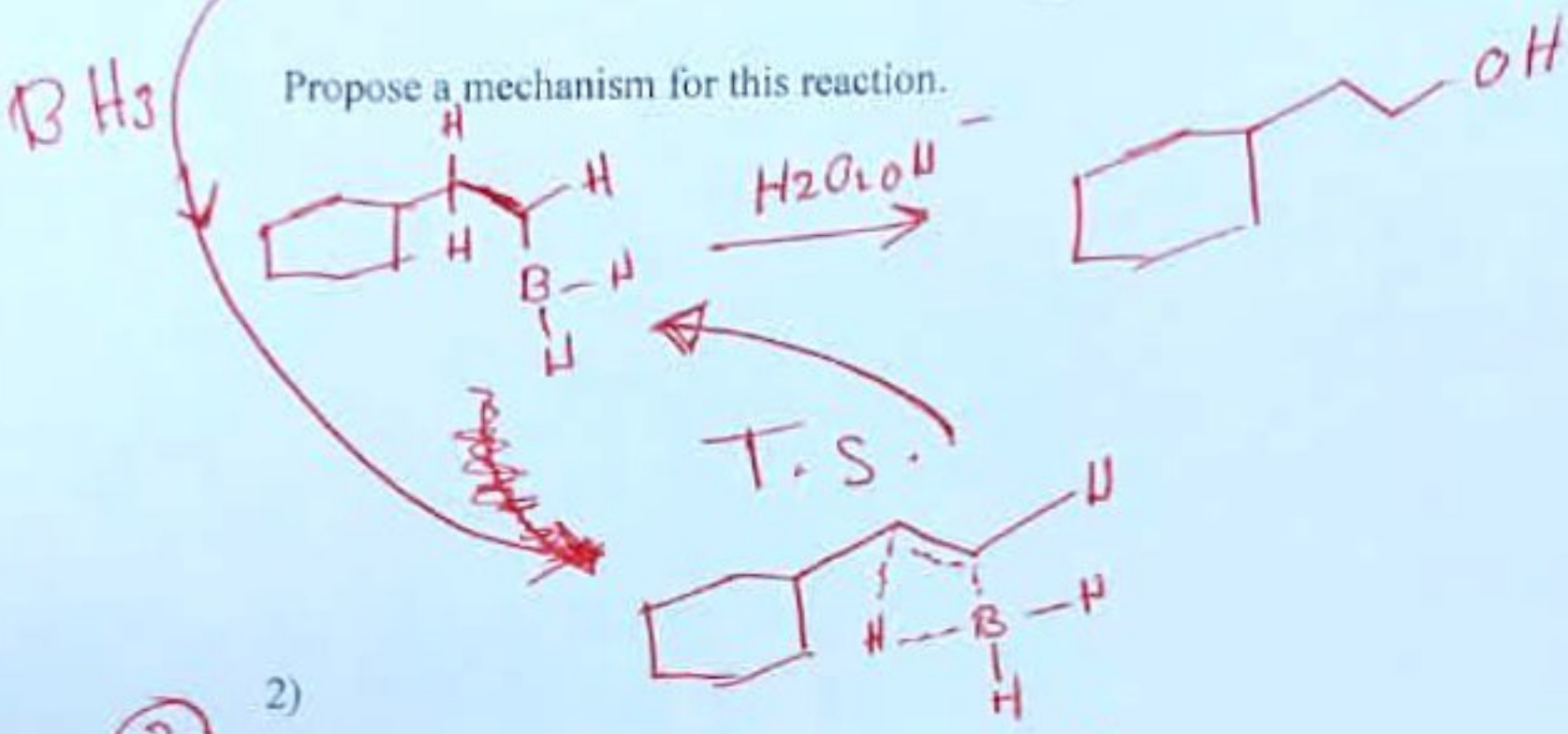
Good luck
Prof. Dr. Hussein M. Alhendawi
Mrs. Nisreen Alattar

6. How would you carry out the following conversions?

(5) 1)



Propose a mechanism for this reaction.



(2) 2)