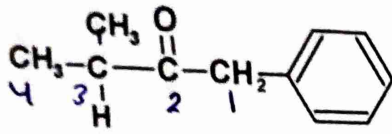


Name the following organic compounds using any nomenclature system:

Common name

(سمي باستخدام اي نظام)

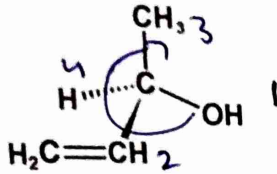
1)



Name: ¹⁾ Benzyl Iso propyl Ketone

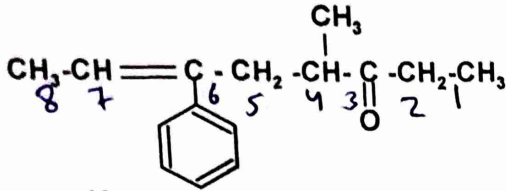
IUP / 1-phenyl-3-methyl but-2-one.

2)



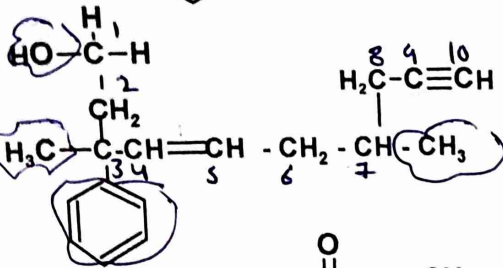
Name: (R) configuration / but-3-en-2-ol

3)



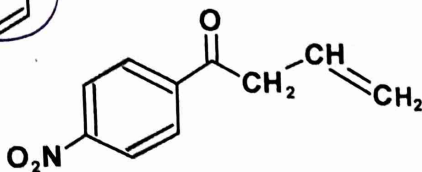
Name: 4-methyl-6-phenyl oct-6-en-3-one

4)



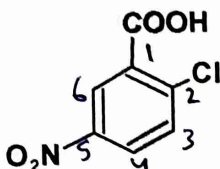
Name: 3,7-dimethyl-3-phenyl oct-4-en-9-yne-1-ol

5)



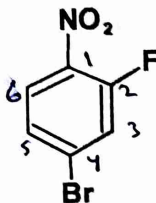
Name: 1-nitrobenzene-3-en-1-one

6)



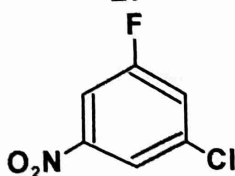
Name: 2-chloro-5-nitro-1-benzoic acid.

7)



Name: 4-Bromo-2-fluoro-1-nitrobenzene

8)

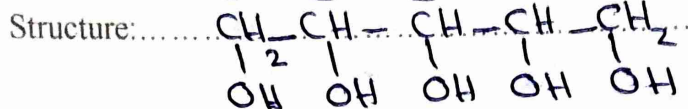


Name: 1-chloro-3-fluoro-5-nitrobenzene.

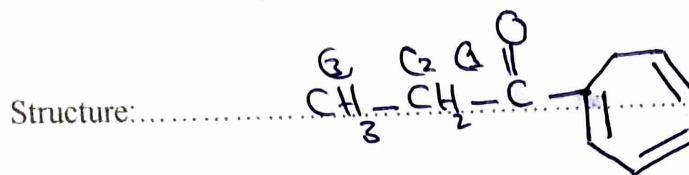
Draw the structures of the following organic compounds.

(ارسم المركبات التالية)

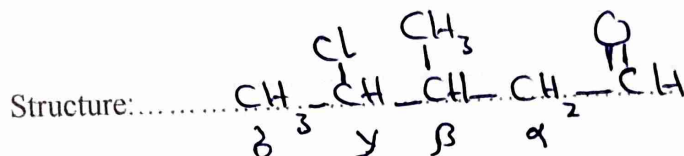
1) Pentane-1,2,3,4,5-pentaol



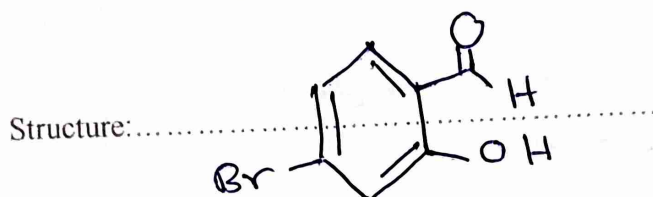
2) 1-Phenylpropan-1-one



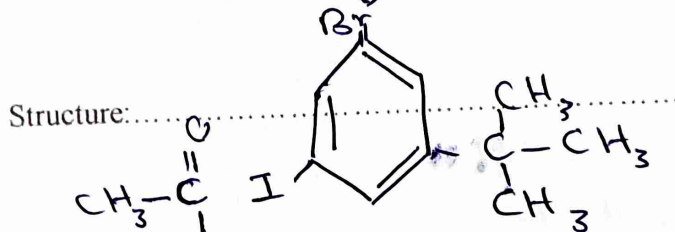
3) γ -Chloro- β -methylvaleraldehyde



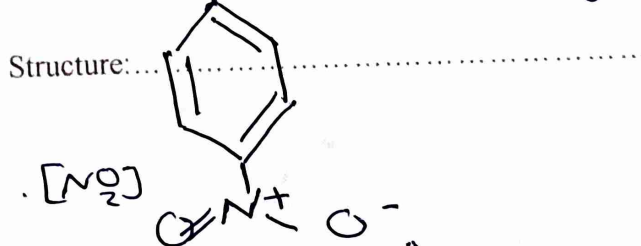
4) 4-Bromo-2-hydroxybenzaldehyde



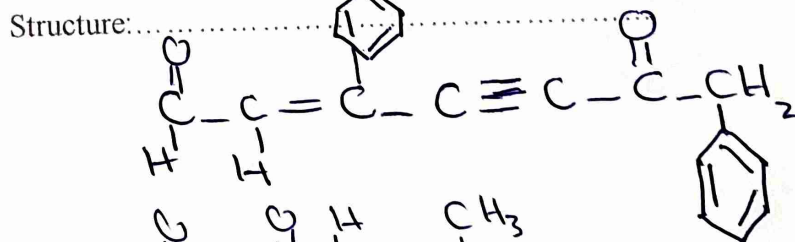
5) 1-Bromo-3-tert-butyl-5-iodobenzene



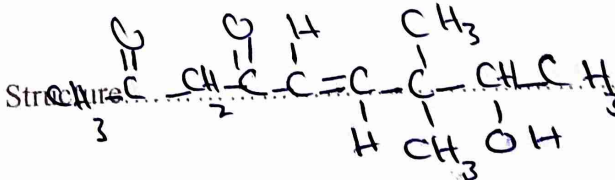
6) p-Nitroacetophenone



7) 6-Oxo-3,7-diphenylhept-2-en-4-yn-1-al



8) 8-Hydroxy-7,7-Dimethylnon-5-en-2,4-dione

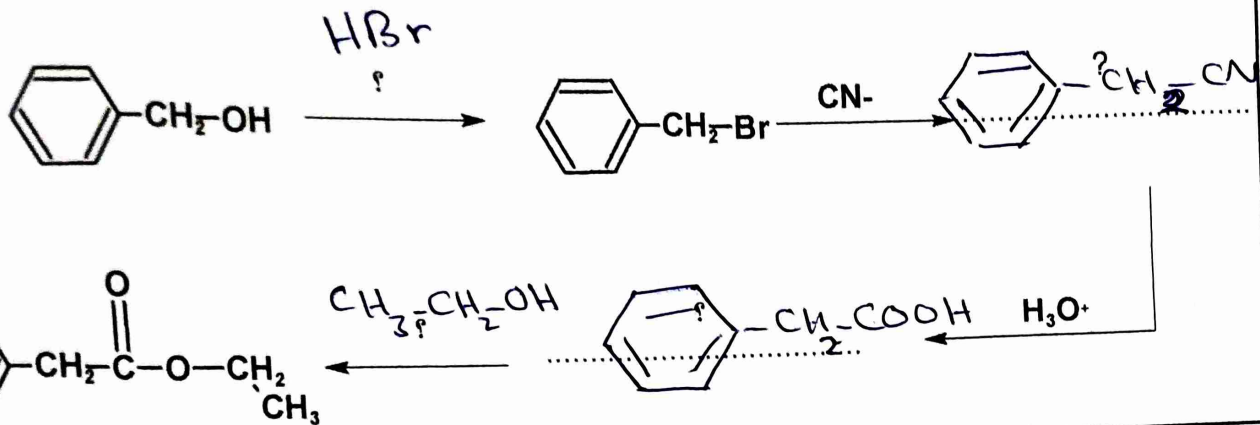


QUESTION 2

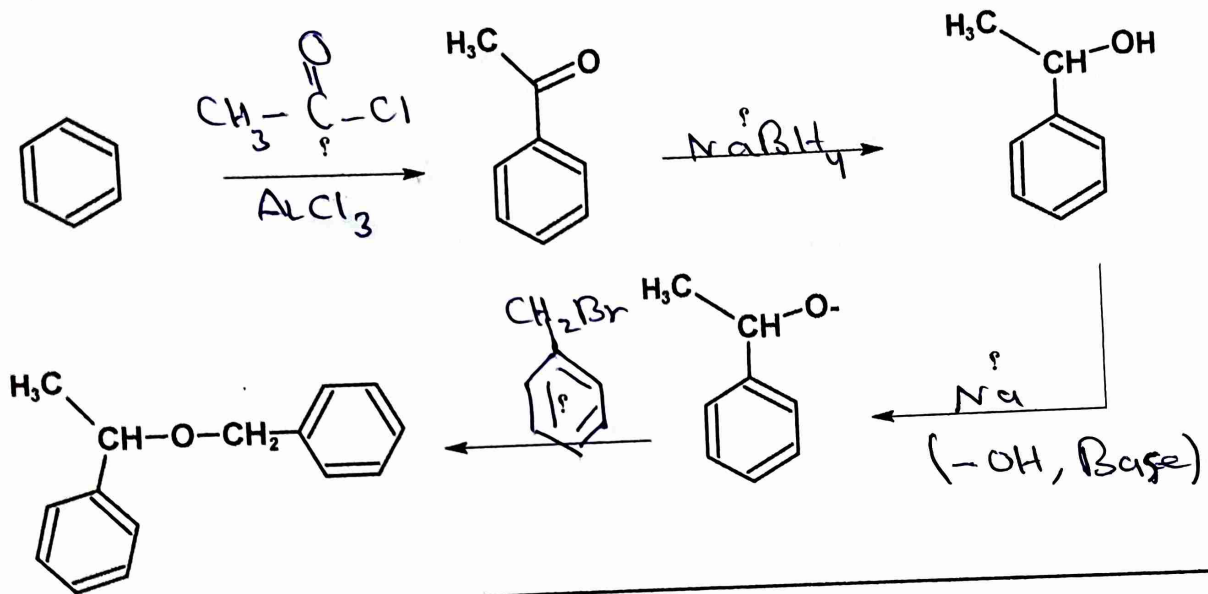
[18 points]

Complete the following reactions by writing the missed reactants or products:

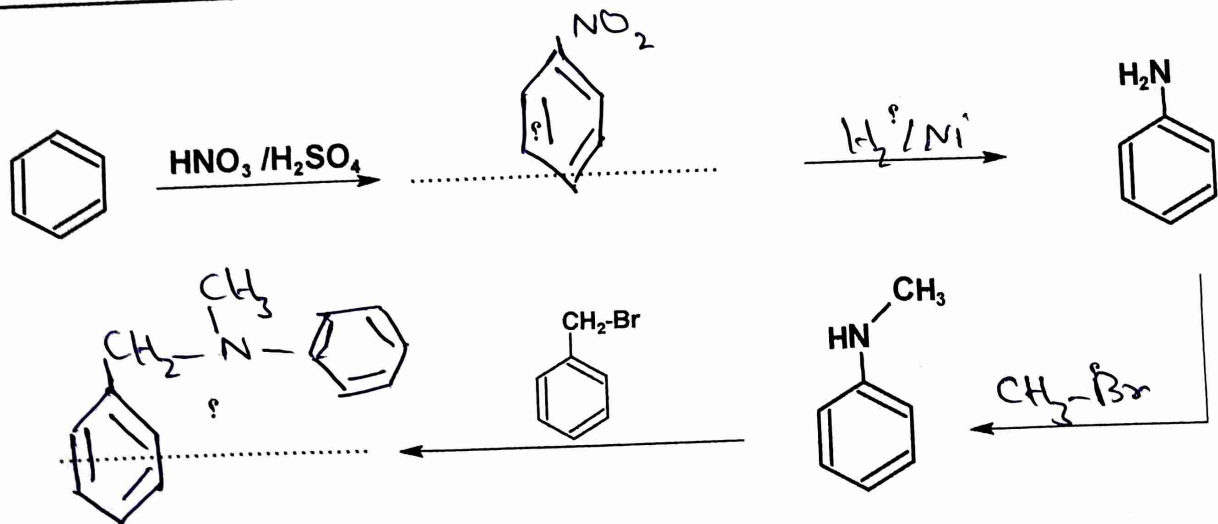
1)

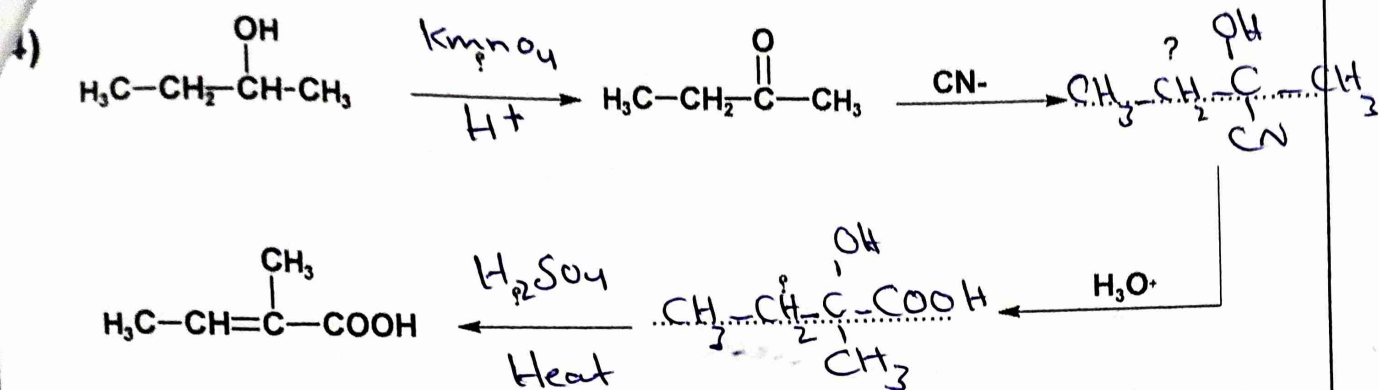


2)

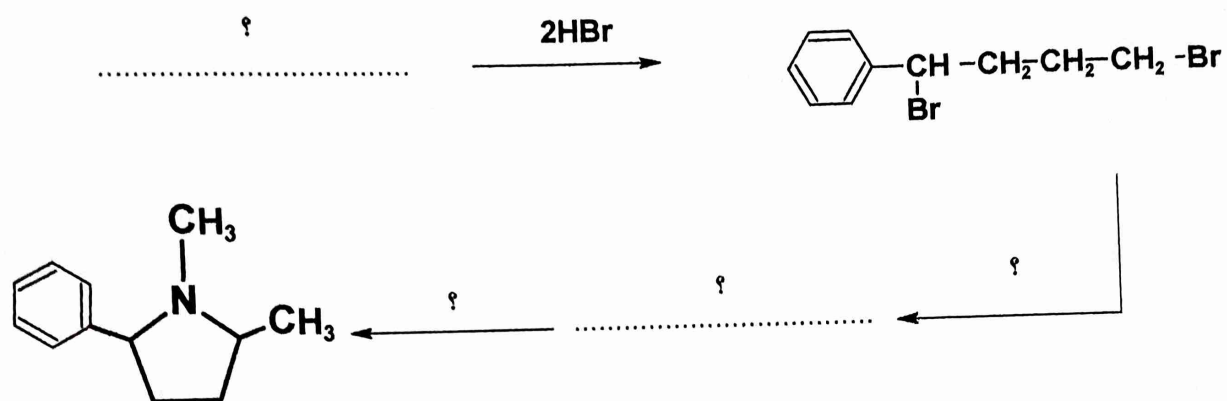


3)

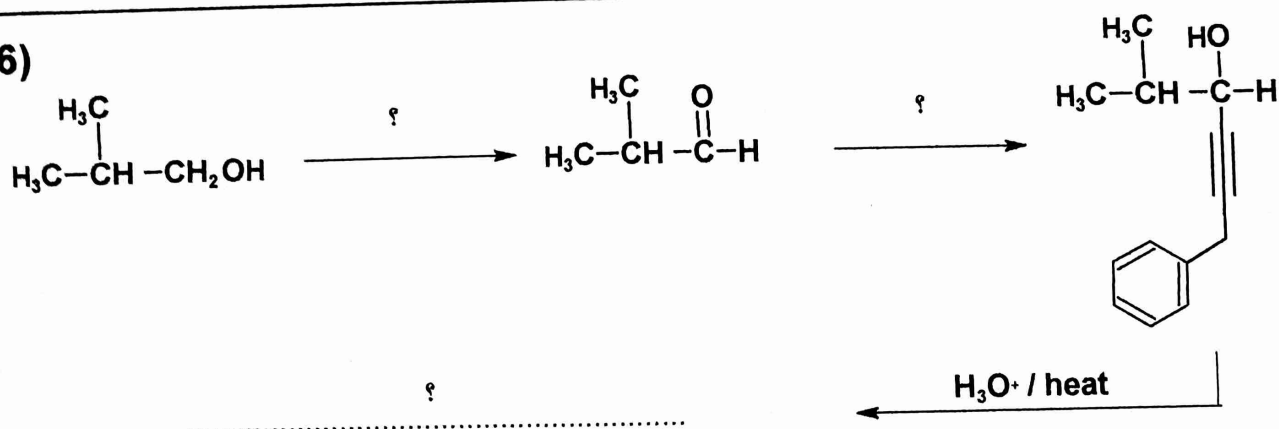




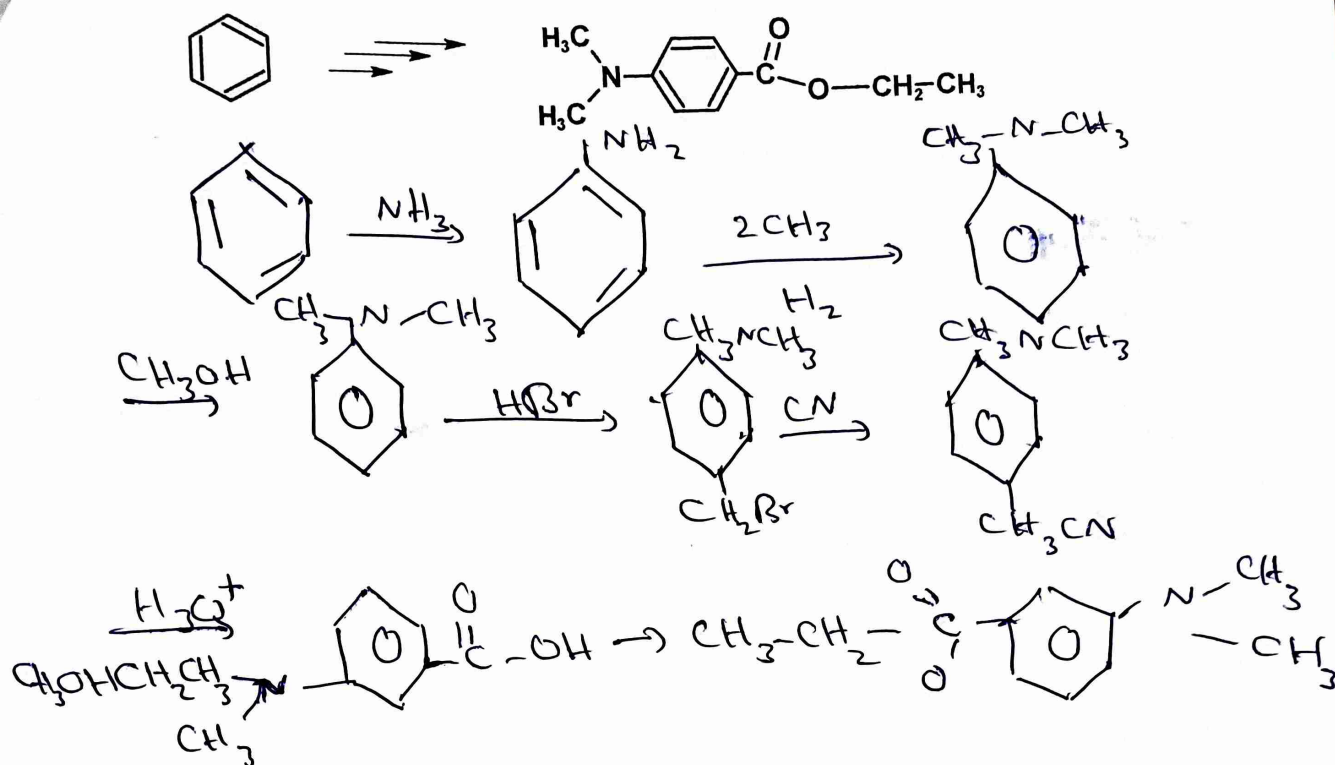
5)



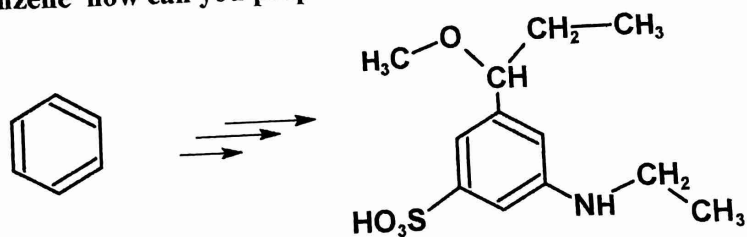
6)



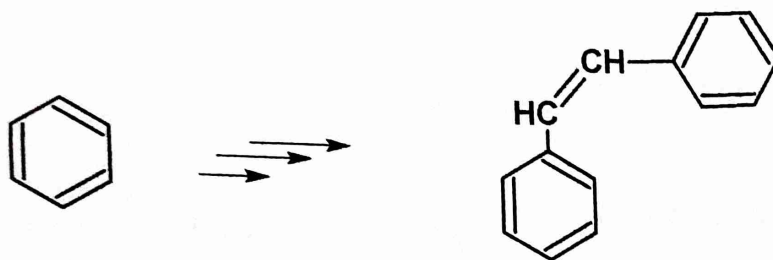
Starting benzene how can you prepare the following.



2) Starting with Benzene how can you prepare the following:



3) Starting with Benzene how can you prepare the following:



QUESTION 4 [4 points].

Write short notes about:

1) Enantiomers physical properties.

⇒ بالإختلاف

2) Tollens' reagent.

Good luck

D.Nabil Shurrah

Q411 1) Enantiomeres physical properties //

Solution //

① They are identical in all physical and chemical ^{properties.} ~~process~~

That is have the same //

- 1) melting point 2) Solubility 3) boiling point.
4) The angle of rotation.

it is differ only in /

The direction of rotation of plane of polarized light.

[one rotate to right other to left].

Q411 2) Tollens reagent //

Solution //

it is the test that is used to differentiate between aldehyde and ketones :-

When aldehyde is oxidized silver ion is reduced to silver metal that precipitates on the test tube as a silver mirror. [Positive tollens reagent test].

⇒ ketones give negative test and it isn't oxidized as no hydrogen present on the ketone functional group.





Abood Ouda

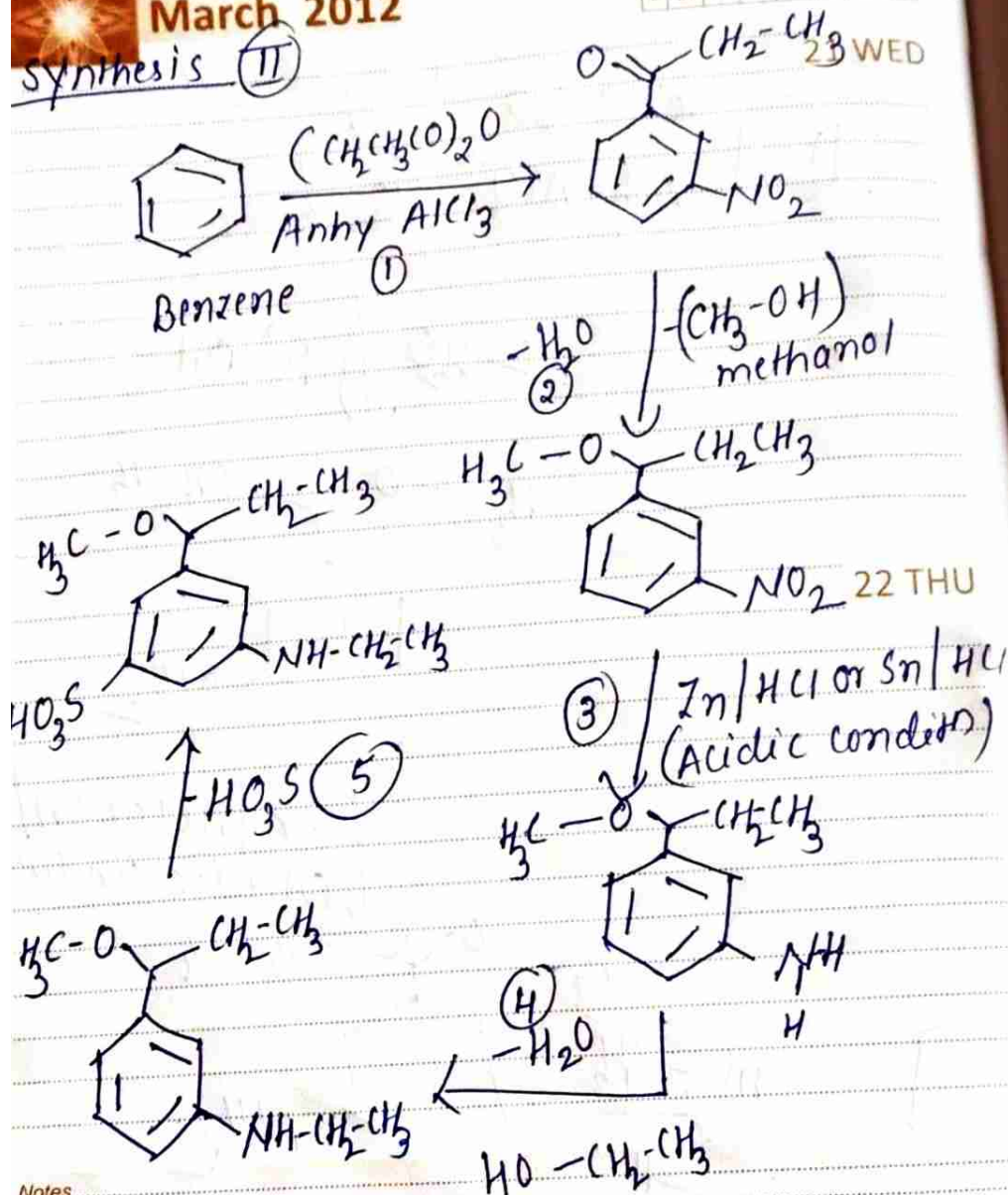
Today, 1:07 PM



March 2012

Synthesis (II)

February 2012	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	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			



Notes



Abood Ouda

Today, 1:07 PM



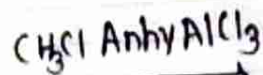
April 2012	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	1	2

Synthesis I

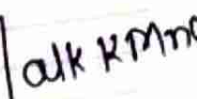
23 FRI



Benzene

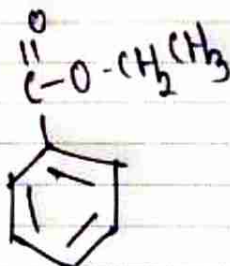


toluene

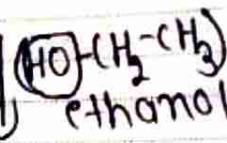
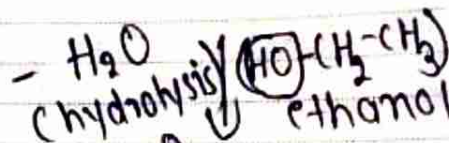


benzoic acid

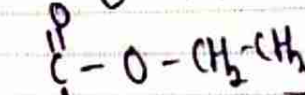
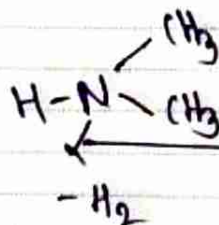
24 SAT



3, (N,N dimethylamide) ethanoic acid.



ethanol

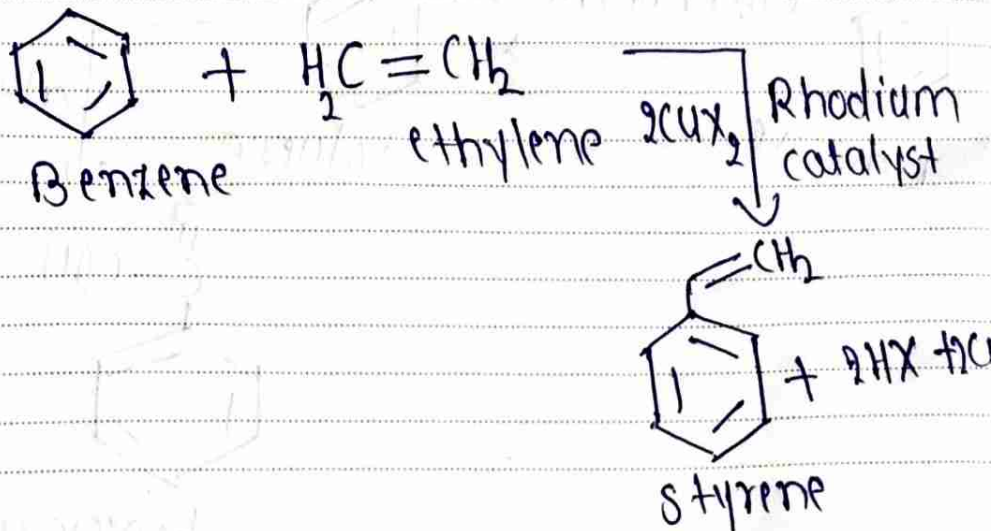


ethanoic acid.

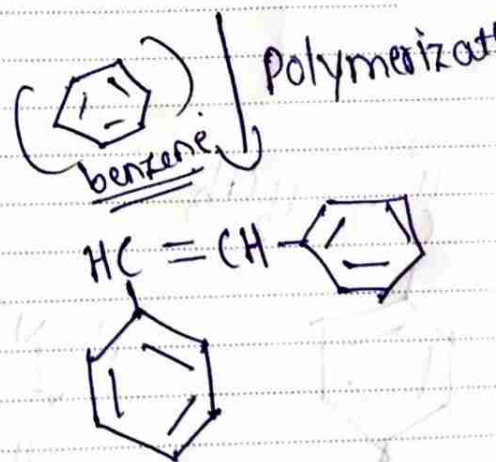


Abood Ouda

Today, 1:07 PM



26 MC



otes