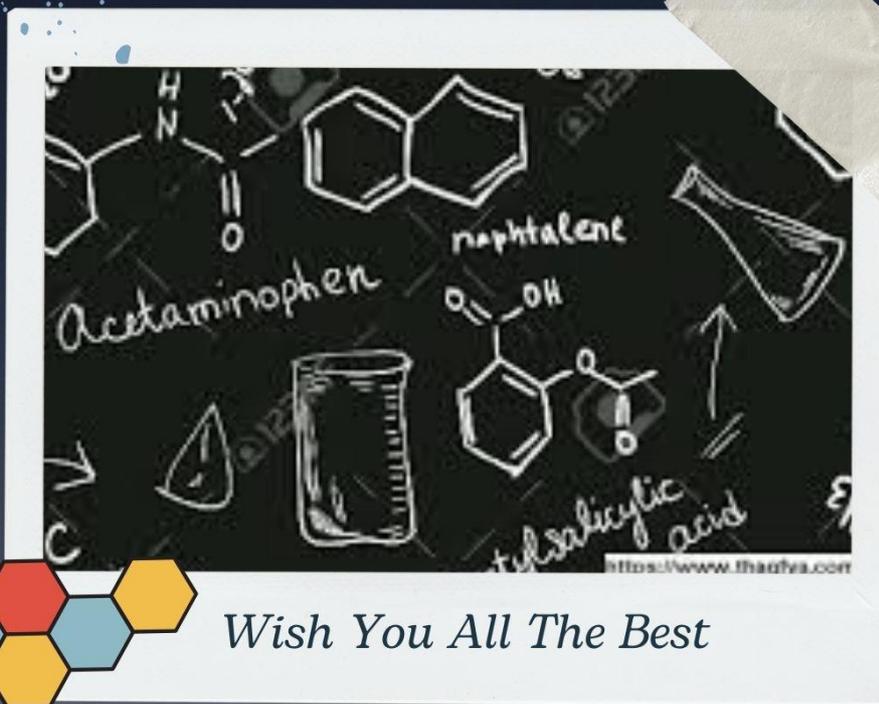
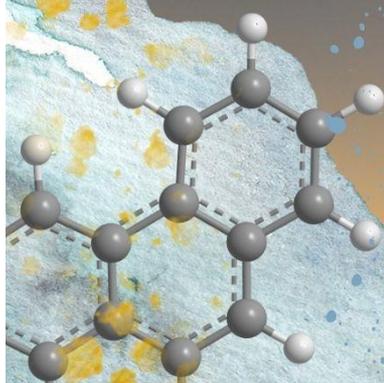


# ORGANIC CHEMISTRY REACTIONS TEST BANK

2021-2022



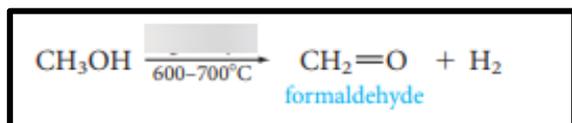
*Wish You All The Best*



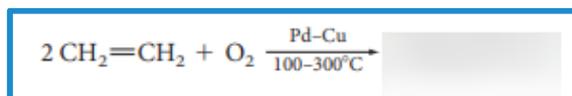
Ebaa al-zubi



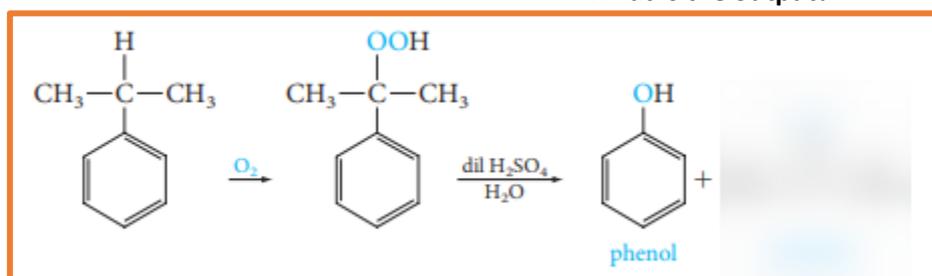
# Ch 9



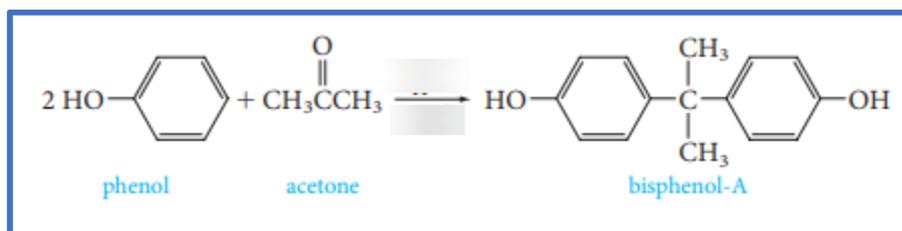
1- What is the reagent ?



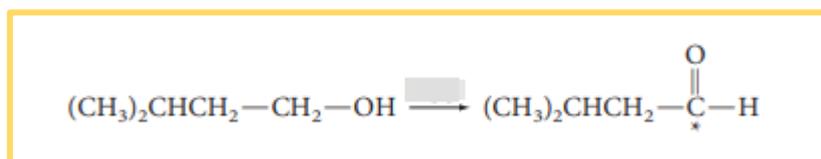
2- What is the output?



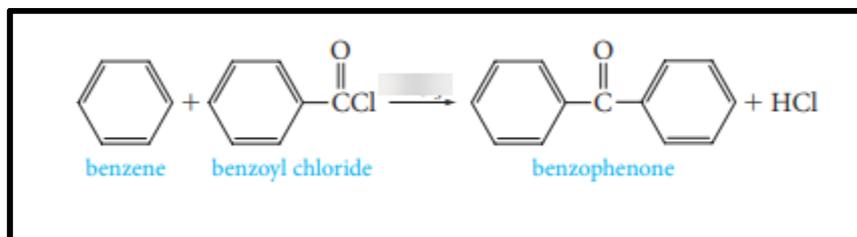
3- What is the output?



4- What is the reagent ?

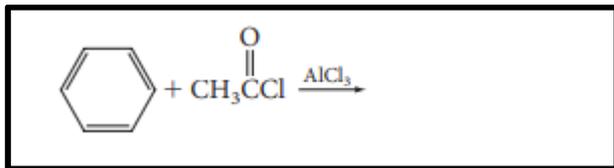


5- What is the reagent ?

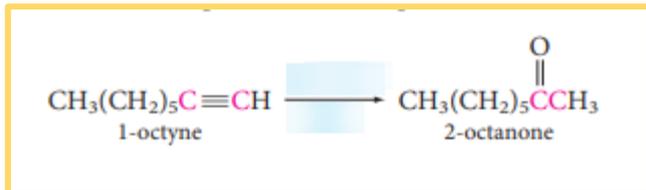


6- What is the reagent ?

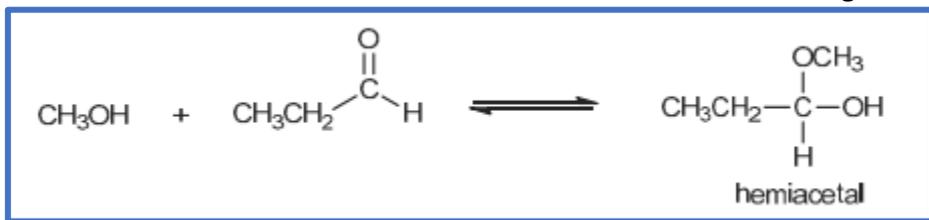
1	2	3	4	5	6
$\xrightarrow[600-700^\circ\text{C}]{\text{Ag catalyst}}$	$2 \text{CH}_3\text{CH}=\text{O}$	$\text{CH}_3\text{-C(=O)-CH}_3$ acetone	$\xrightarrow[-\text{H}_2\text{O}]{\text{H}^+}$	PCC	AlCl <sub>3</sub>



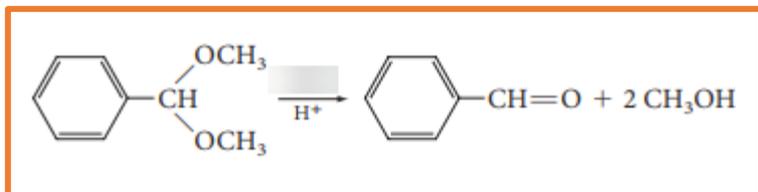
What is the output?



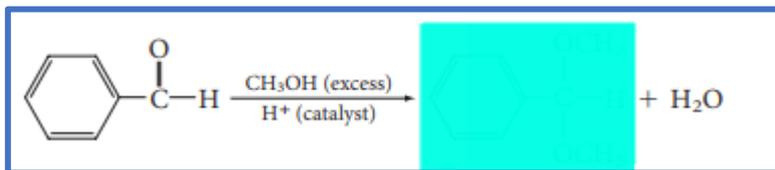
What is the reagent ?



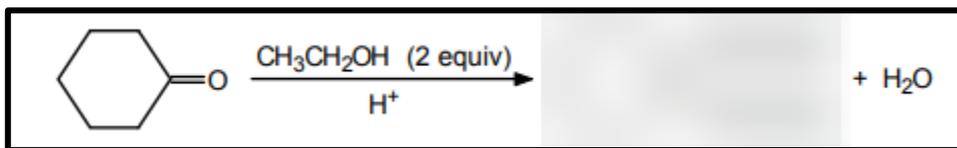
What is the reagent ?



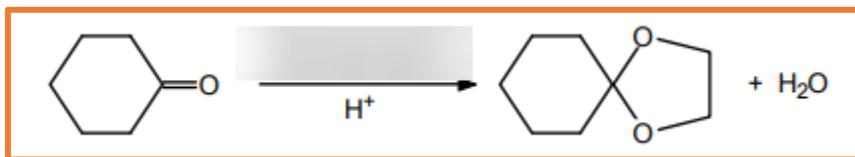
What is the reagent ?



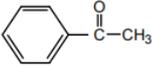
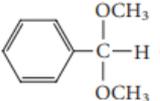
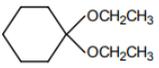
What is the output?

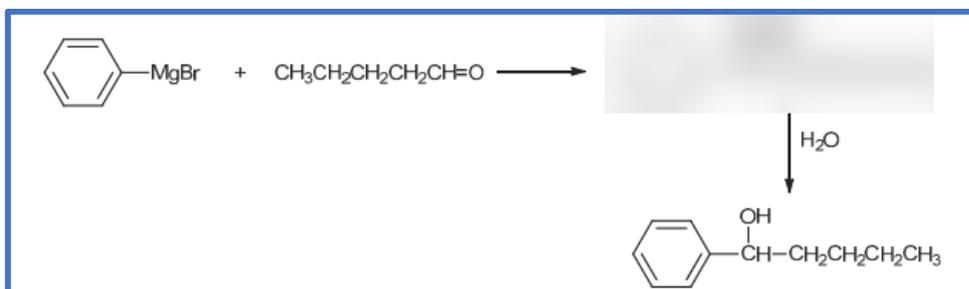


What is the output?

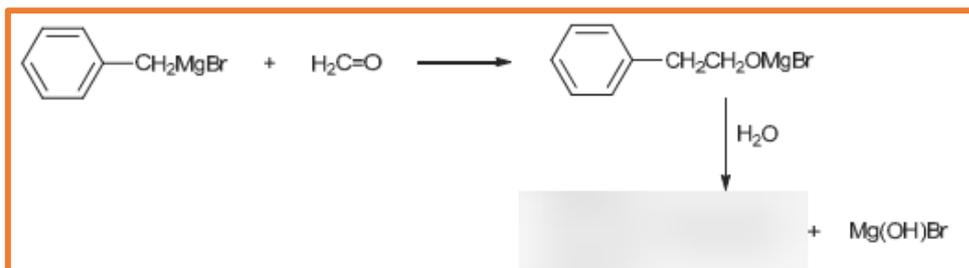


What is the reagent ?

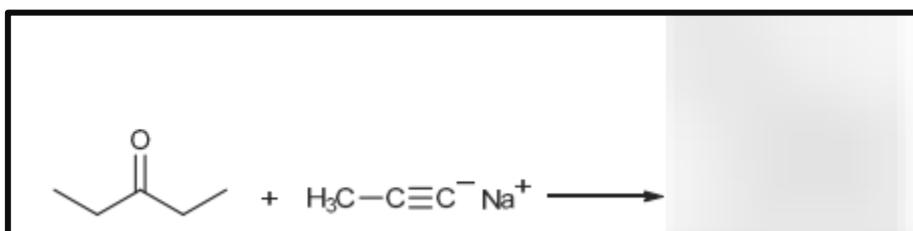
7	8	9	10	11	12	13
 acetophenone	$\xrightarrow[\text{Hg}^{2+}]{\text{H}^+, \text{H}_2\text{O}}$	$\xrightleftharpoons{\text{H}^+}$	H <sub>2</sub> O			HOCH <sub>2</sub> CH <sub>2</sub> OH



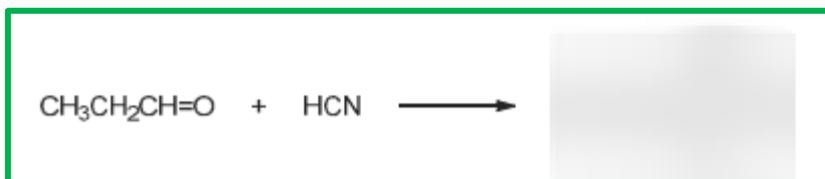
What is the output?



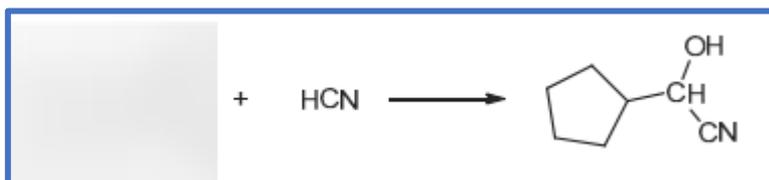
What is the output?



What is the output?



What is the output?



What is the output?

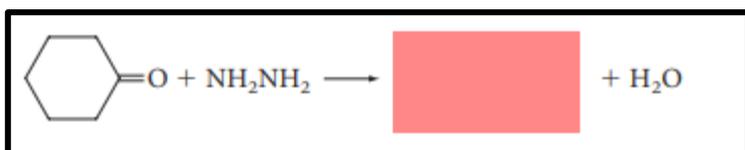


What is the input?

14	15	16	17	18	19
<chem>c1ccccc1C(O[Mg]Br)CCCC</chem>	<chem>c1ccccc1CCH2OH</chem>	<chem>CCC(=C[ONa])CC</chem>	<chem>CH3CH2C(O)CN</chem>	<chem>C1CCCC1C=O</chem>	<chem>c1ccccc1C(O)(C#N)c2ccccc2</chem>



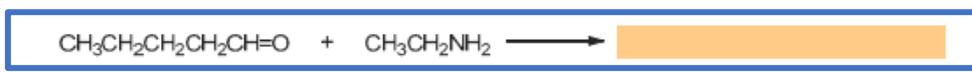
20- What is the output?



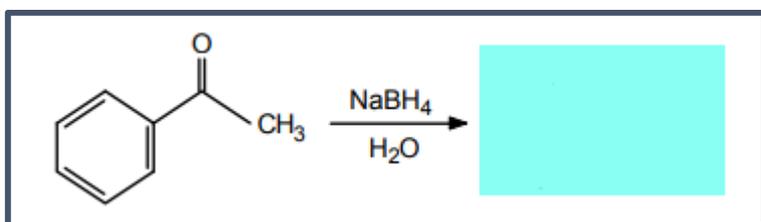
21- What is the output?



22- What is the input?



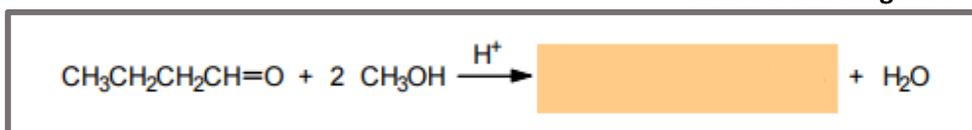
23- What is the output?



24- What is the output?



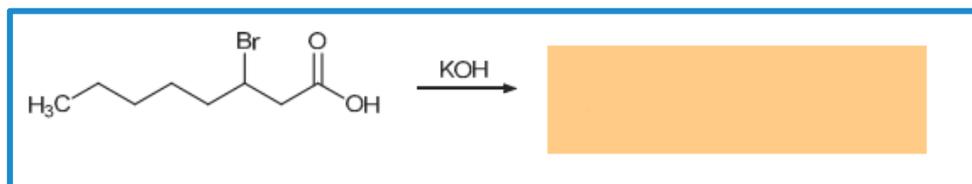
25- What is the reagent ?



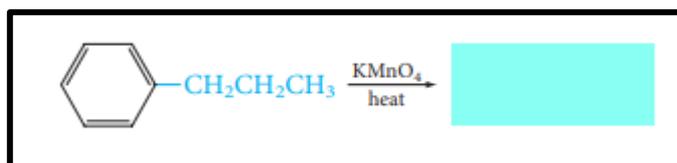
26- What is the output?

20	21	22	23	24	25	26
		<chem>NH2OH</chem>	<chem>CH3CH2CH2CH2CH=NCH2CH3</chem>		<chem>CrO3, H+</chem> (Jones' reagent)	<chem>CH3CH2CH2CH(OCH3)2</chem>

# Ch 10



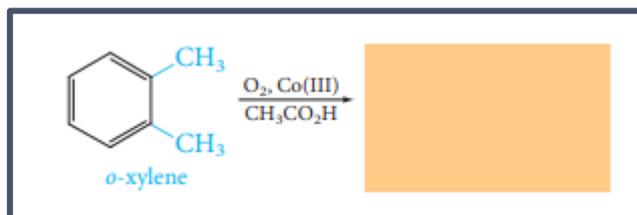
What is the output?



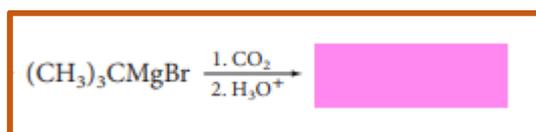
What is the output?



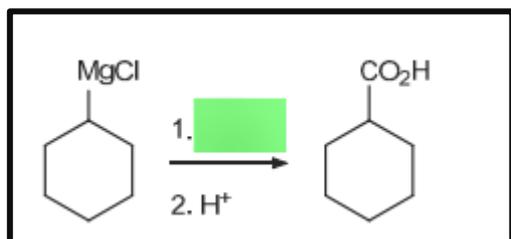
What is the reagent ?



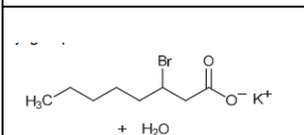
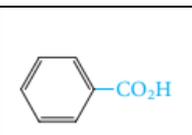
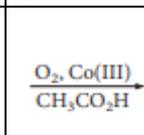
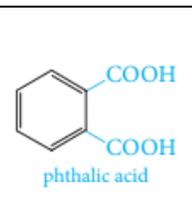
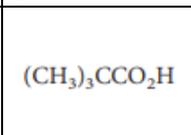
What is the output?

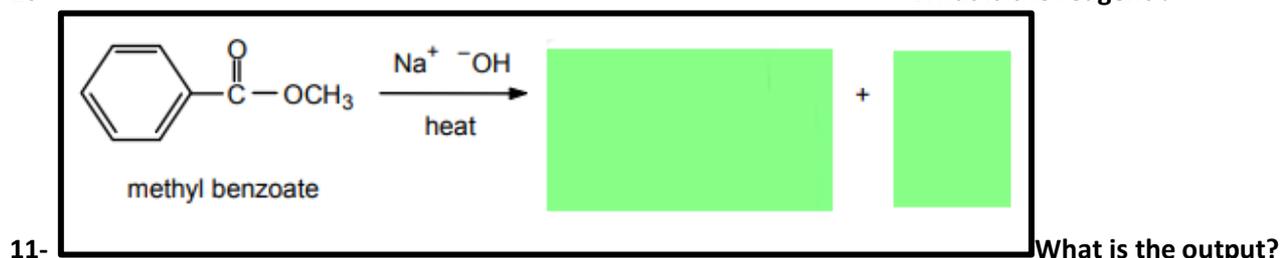
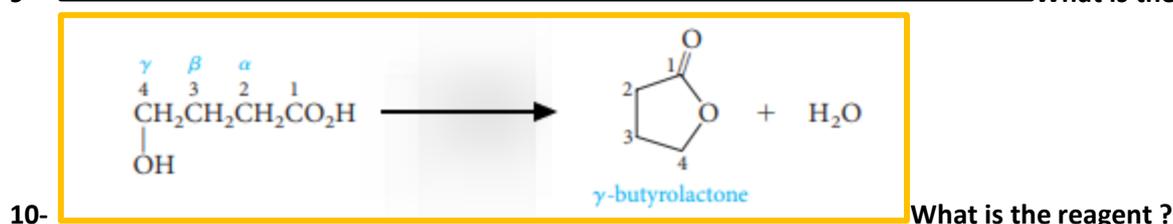
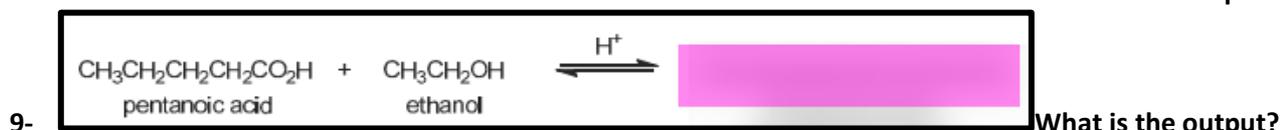
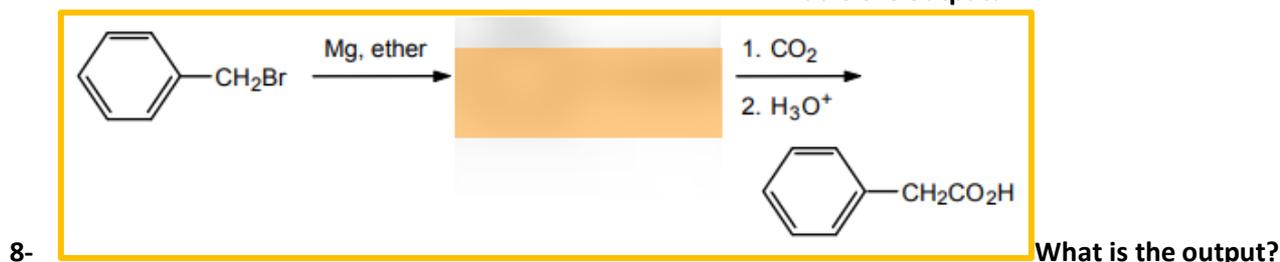


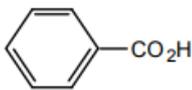
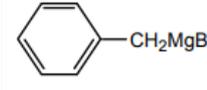
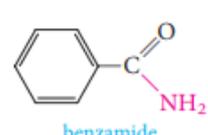
What is the output?

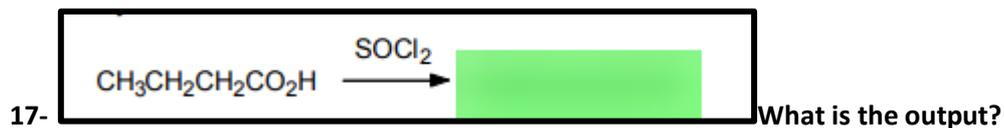
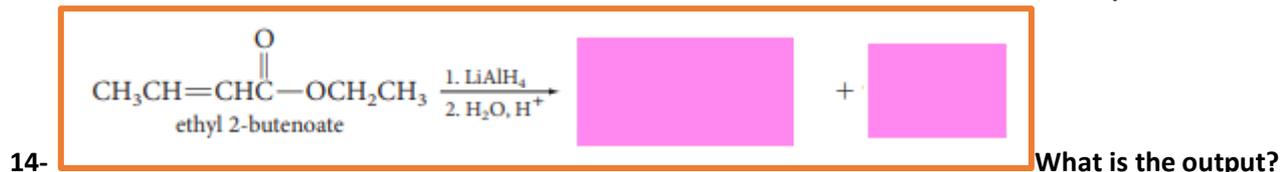
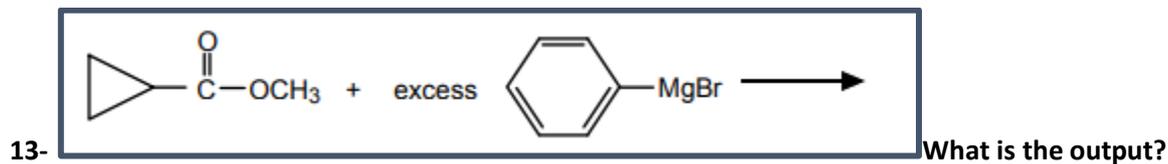


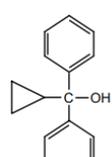
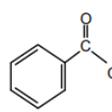
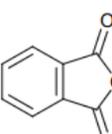
What is the reagent ?

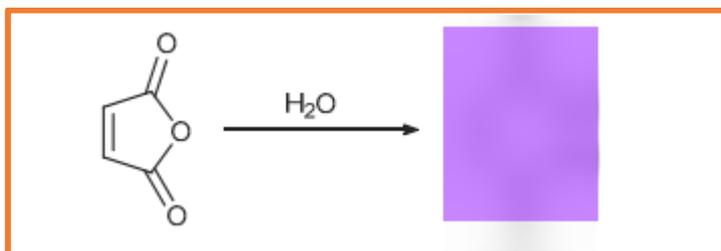
1	2	3	4	5	6
					



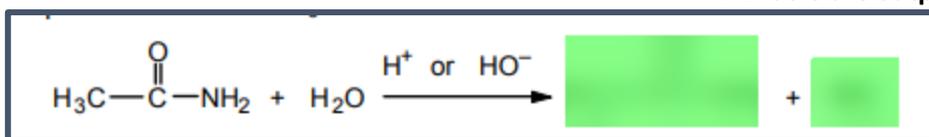
7	8	9	10	11	12
		$\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{CH}_2\text{CH}_3$ ethyl pentanoate	$\xrightarrow[\text{or heat}]{\text{H}^+}$	$\text{C}_6\text{H}_5\text{CO}_2^-\text{Na}^+ + \text{CH}_3\text{OH}$ sodium benzoate      methanol	 benzamide



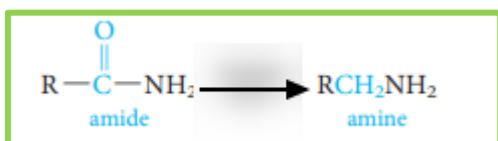
13	14	15	16	17	18	19
	<chem>CH3CH=CHCH2OH + CH3CH2OH</chem> 2-buten-1-ol	<chem>[Li]AlH4</chem> ether		<chem>CH3CH2CH2COCl</chem>		<chem>H3C-C(=O)-OCH2CH2CH2CH2CH2CH3</chem>



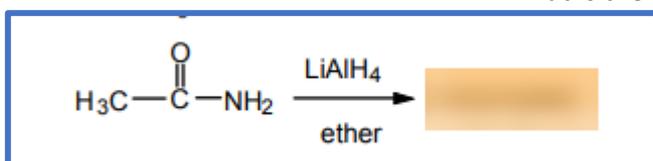
What is the output?



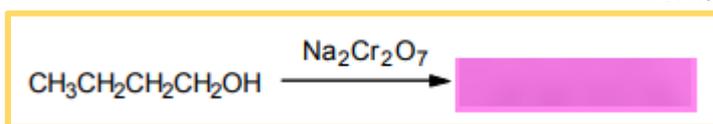
What is the output?



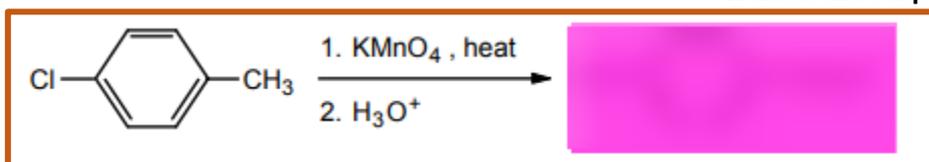
What is the reagent ?



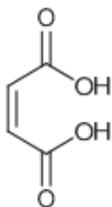
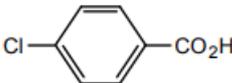
What is the output?

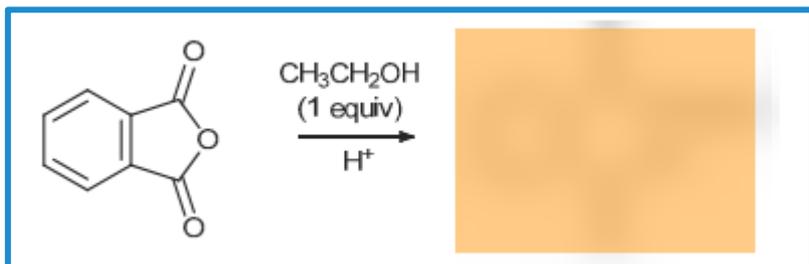


What is the output?

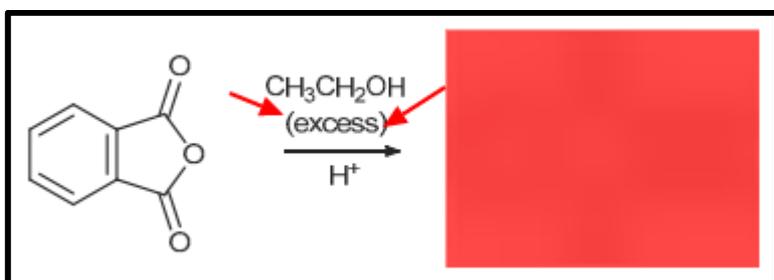


What is the output?

20	21	22	23	24	25
	$\text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{OH} + \text{NH}_3$	$\xrightarrow[\text{ether}]{\text{LiAlH}_4}$	$\text{CH}_3\text{CH}_2\text{NH}_2$	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CO}_2\text{H}$	



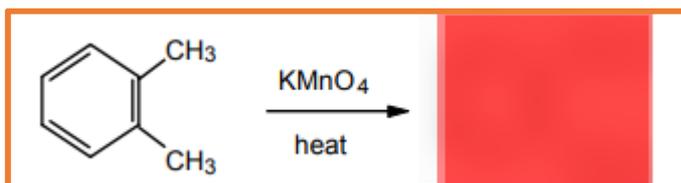
26- What is the output?



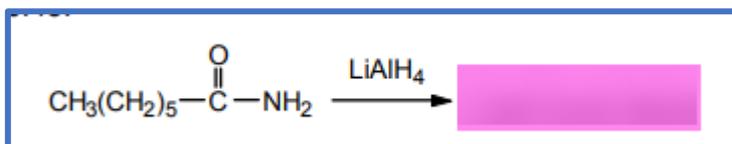
27- What is the output?



28- What is the output?



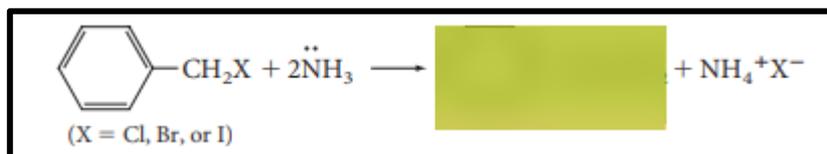
29- What is the output?



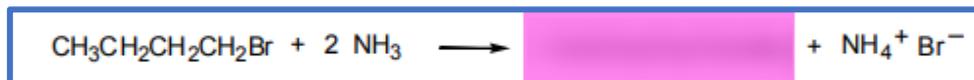
30- What is the output?

26	27	28	29	30
<chem>CCOC(=O)c1ccccc1C(=O)O</chem>	<chem>CCOC(=O)c1ccccc1C(=O)OCC</chem>	<chem>CCOC(=O)c1ccccc1</chem>	<chem>OC(=O)c1ccccc1C(=O)O</chem>	<chem>CCCCCN</chem>

# Ch 11



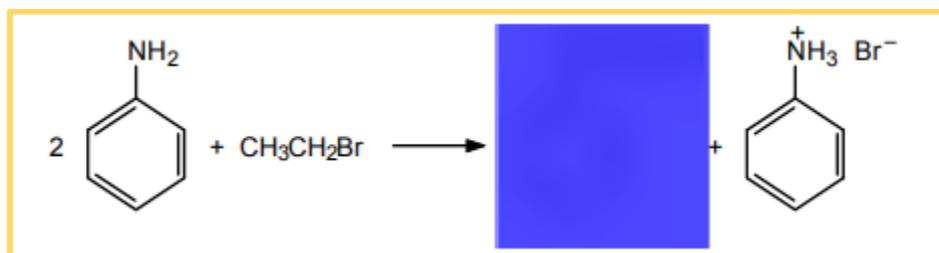
What is the output?



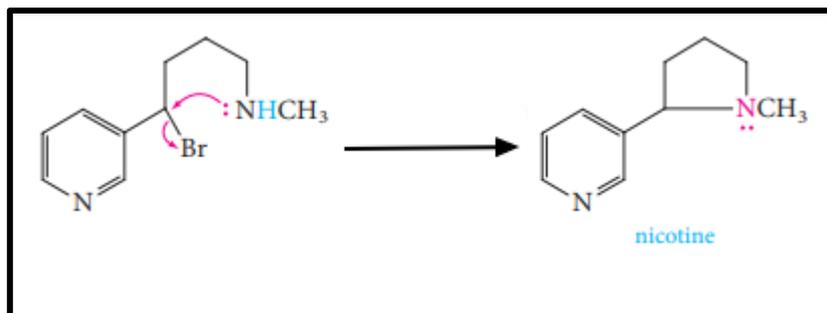
What is the output?



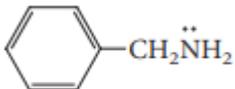
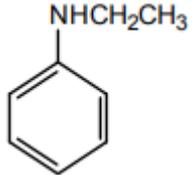
What is the output?

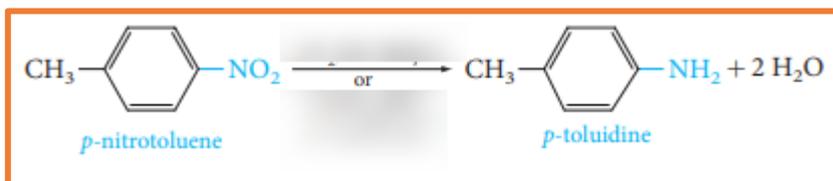


What is the output?

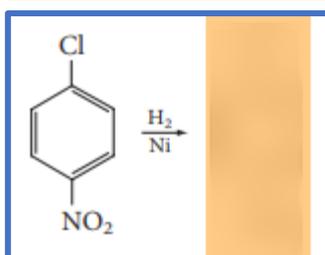


What is the reagent?

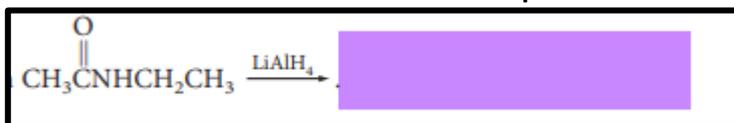
1	2	3	4	5
	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2$	$(\text{CH}_3\text{CH}_2)_3\text{N}$		$\xrightarrow[\text{-HBr}]{\text{Intramolecular } S_N2}$



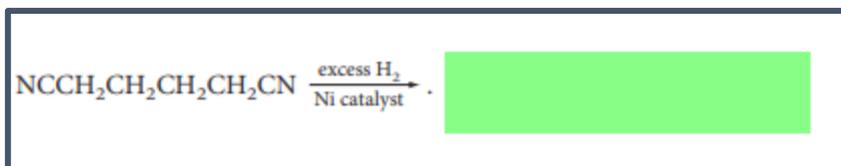
6- What is the reagent ?



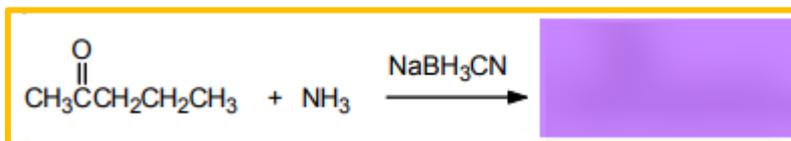
7- What is the output?



8- What is the output?



9- What is the output?

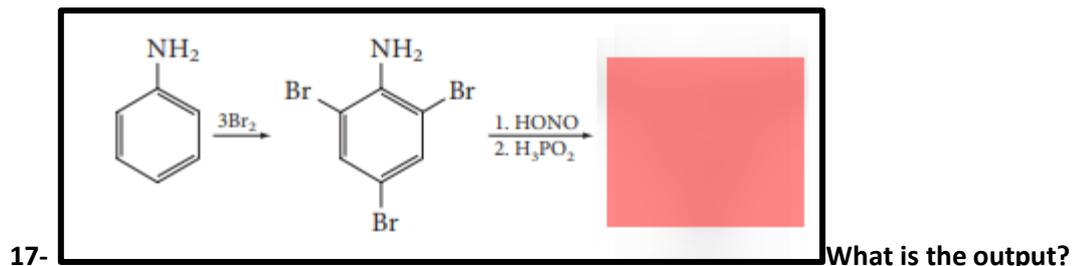
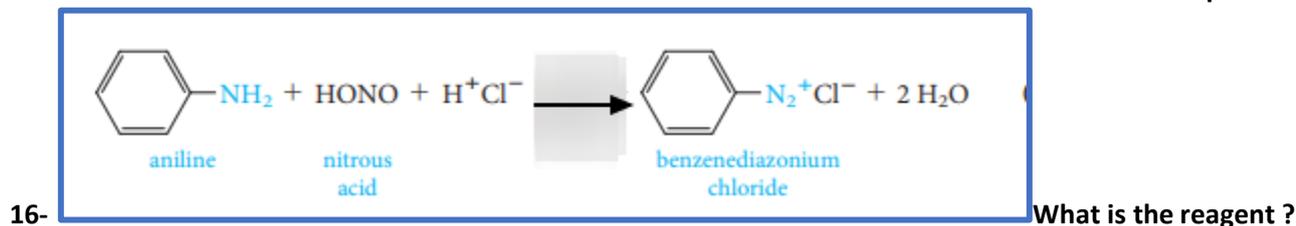


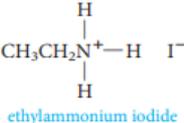
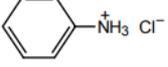
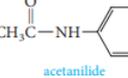
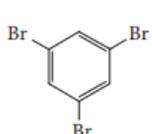
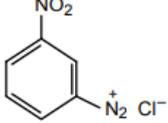
10- What is the output?

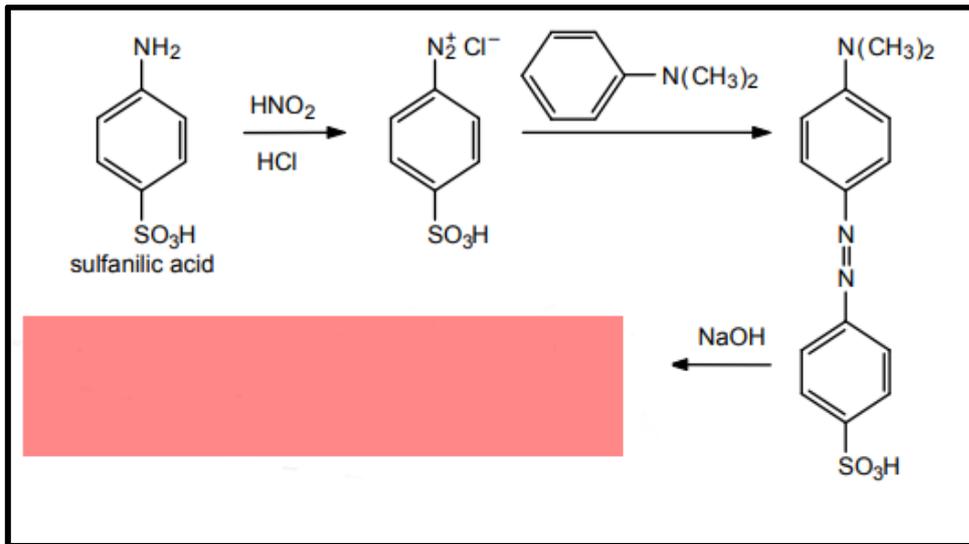


11- What is the reagent ?

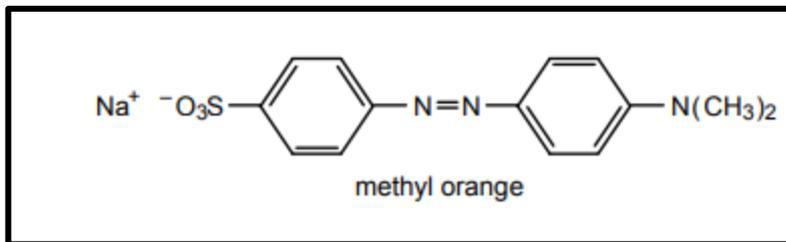
6	7	8	9	10	11
$\xrightarrow[1. \text{SnCl}_2, \text{HCl}]{3 \text{H}_2, \text{Ni catalyst}}$ $\xrightarrow{2. \text{NaOH}, \text{H}_2\text{O}}$	<chem>Nc1ccc(Cl)cc1</chem>	<chem>CCNCC</chem>	<chem>NCCCCCN</chem>	<chem>CC(N)CC</chem>	<chem>NaBH3CN</chem>



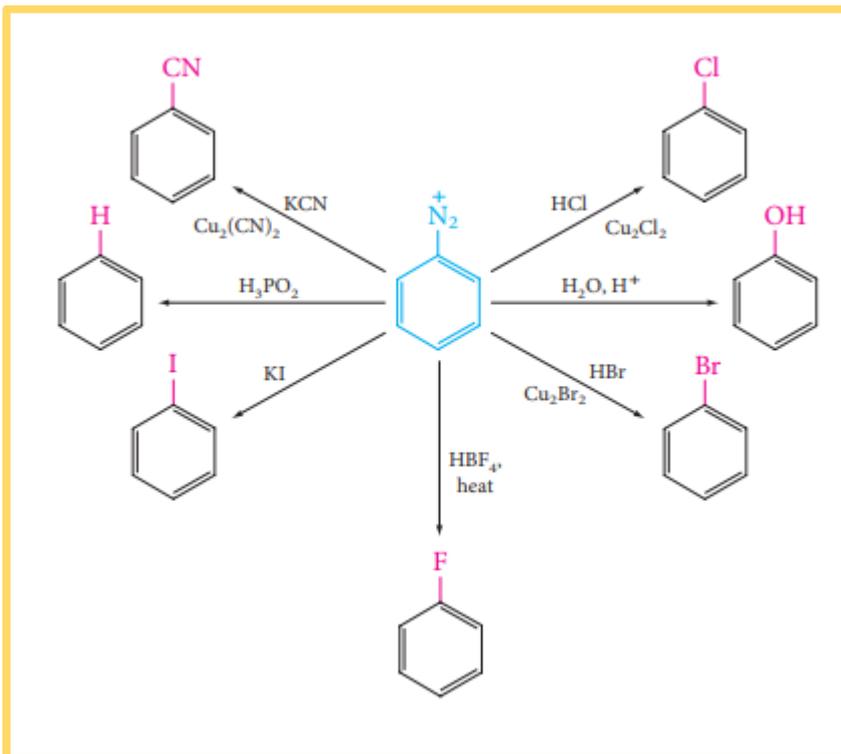
12	13	14	15	16	17	18
$(\text{CH}_3)_3\text{NH}^+ + ^-\text{OH}$	 ethylammonium iodide		 + $\text{CH}_3\text{CO}_2\text{H}$	$\xrightarrow[\text{aqueous solution}]{0-5^\circ\text{C}}$		



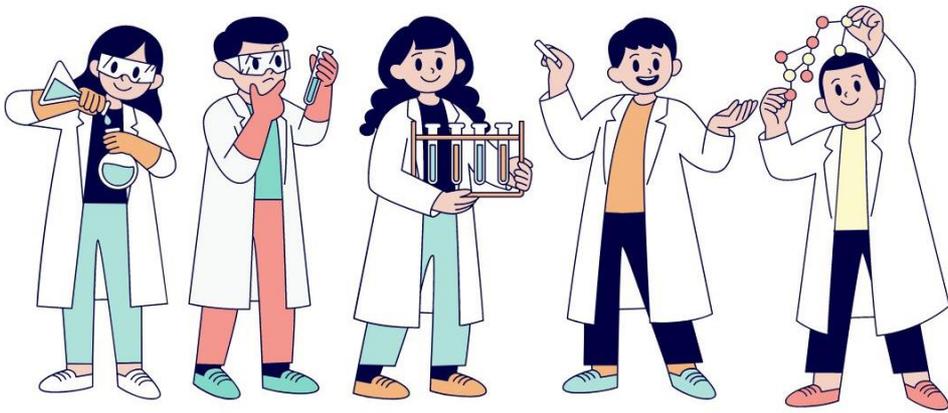
19-



ANS :



Wish You All The Best



 Ebaa AL-ZUBI