



جامعة الملك سعود - كلية العلوم - قسم الكيمياء  
(الاختبار النصفى الثانى) في مقرر 145 كيم (1435-06-15هـ) الموافق (15-04-2014م)  
الفصل الدراسي الثاني 1435/1434هـ  
الزمن: ساعة و نصف  
أسم الطالبة: **Model Answer** رقم الطالبة:  
رقم الشعبة: رقم التسلسل:

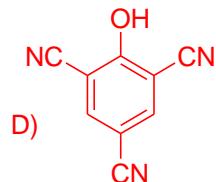
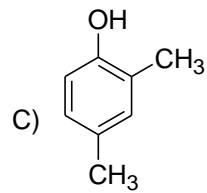
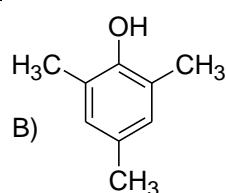
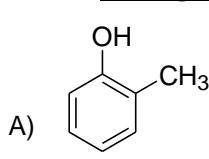
ملحوظة هامة: تصحيح الامتحان سيكون بناء على الإجابة المكتوبة في الجدول أسفل (حرف الإجابة الصحيحة) ولن ينظر إلى بقية الأوراق والتي تعتبر مسودة.

### Answer Sheet\*

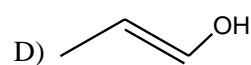
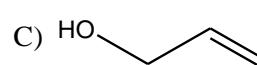
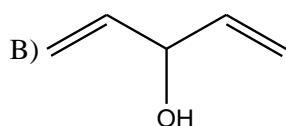
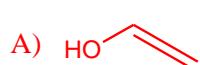
الإجابة	Question	الإجابة	Question
	18		1
	19		2
	20		3
	21		4
	22		5
	23		6
	24		7
	25		8
	26		9
	27		10
	28		11
	29		12
	30		13
			14
			15
			16
			17

**(I) Choose the correct answer for the following:**

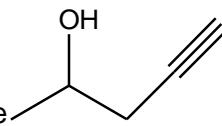
1. The strongest acid is:



2. Which one from the following is an example of vinyl alcohol?



3. The IUPAC name for the following structure

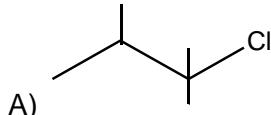


is:

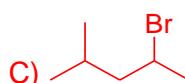
- A) 1-Pentyne-4-ol  
C) 4-Pentyne-2-ol

- B) 4-Hydroxy-pent-1-yne  
D) 2-Hydroxy-pent-4-yne

4. Which of the following compounds is a secondary ( $2^\circ$ ) organic halide?

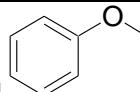


B)



D)  $\text{CH}_3\text{I}$

5. The common name for this compound



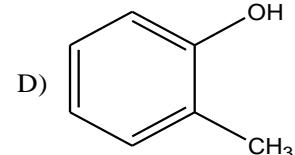
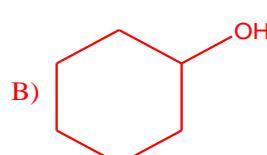
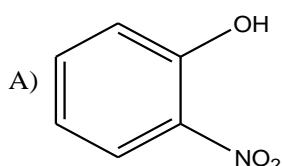
is:

- A) Styrene      B) Anisol      C) Aniline      D) Toluene

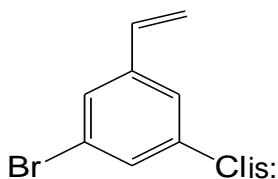
6. Which of the following compounds has the lowest boiling point?

- A) Pentane      B) Butyl methyl ether      C) Pentanol      D) Pentyl bromide

7. Which of the following compounds will not react with (NaOH)?



8. The correct **IUPAC** name for the following compound



- A) *m*-Bromo-*m*-chloro styrene      B) *m*-Chloro-*m*-bromostyrene  
C) 3-Bromo-5-chloro styrene      D) 5-Bromo-3-chloro styrene

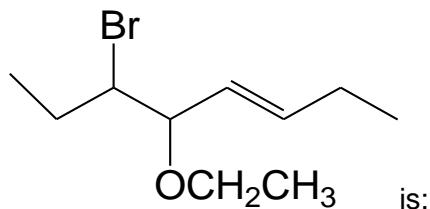
9. Which of the following compounds can be considered as a **glycol**?



10. The **boiling points** increase in the order of:

- A) CH<sub>3</sub>Br < CH<sub>3</sub>Cl < CH<sub>3</sub>F < CH<sub>3</sub>I      B) CH<sub>3</sub>F < CH<sub>3</sub>Cl < CH<sub>3</sub>Br < CH<sub>3</sub>I  
C) CH<sub>3</sub>I < CH<sub>3</sub>F < CH<sub>3</sub>Cl < CH<sub>3</sub>Br      D) CH<sub>3</sub>Cl < CH<sub>3</sub>Br < CH<sub>3</sub>F < CH<sub>3</sub>I

11. The correct **IUPAC** name of the following compound



is:

- A) 6-Bromo-5-ethoxy-3-octene  
B) 3-Bromo-4-ethoxy-5-octene  
C) 6-Bromo-6-ethyl-5-ethoxy-3-hexene  
D) 1-Bromo-1-ethyl-2-ethoxy-3-hexene

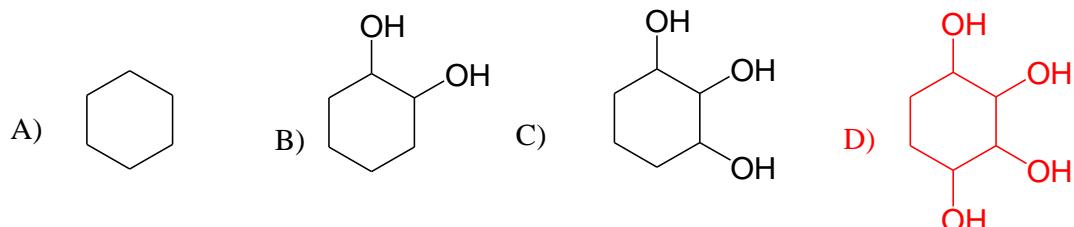
12. Which of the following compounds is **not** aromatic?



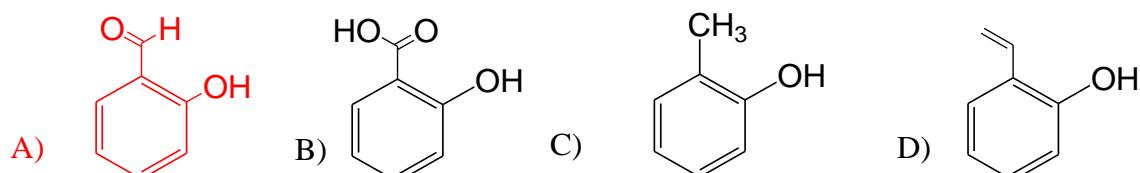
13. Which of the following compounds can't react with CrO<sub>3</sub>?



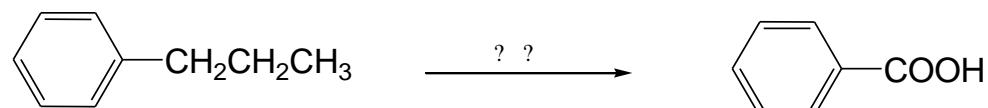
14. Which of the following compounds is the most soluble in water?



15. The correct structure of Salicylaldehyde is

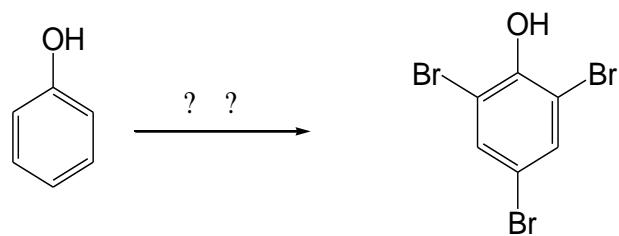


16. What is the correct reagent could be used in the following reaction?



- A) O<sub>3</sub>, then Zn,H<sub>2</sub>O      B) KMnO<sub>4</sub>      C) LiAlH<sub>4</sub>      D) H<sub>2</sub>SO<sub>4</sub>/SO<sub>3</sub>

17. What is the correct condition for the following reaction?



- A) Br<sub>2</sub> / FeBr<sub>3</sub>      B) Br<sub>2</sub> / AlCl<sub>3</sub>      C) Br<sub>2</sub> /CCl<sub>4</sub>      D) Br<sub>2</sub> /H<sub>2</sub>O

18. The Bromine (-Br) as a substituent on the benzene ring can be effected toward the electrophilic aromatic substitution reactions, as:

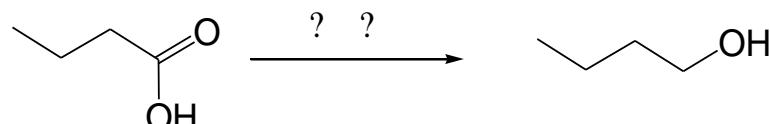
- A) Activating and O- / P- director  
B) Activating and m- director  
C) Deactivating and O- / P- director  
D) Deactivating and m- director

19. Which is the correct reagent could be used in the following reaction?



- A)  $\text{Cl}_2/\text{UV light}$       B)  $\text{SOCl}_2$       C)  $\text{Cl}_2/\text{FeCl}_3$       D)  $\text{CH}_3\text{MgCl}$
- 

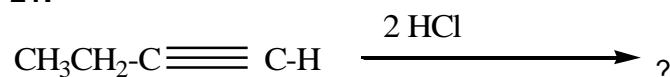
20. Which is the correct reagent for the following reaction?



- A)  $\text{LiAlH}_4$       B)  $\text{H}_2\text{SO}_4/\text{SO}_3$       C)  $\text{KMnO}_4$       D)  $\text{KOH}$
- 

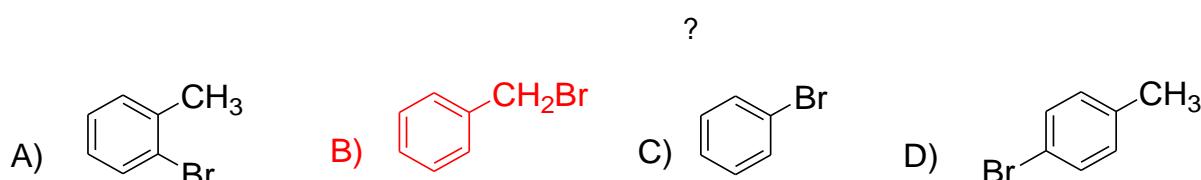
## II) Choose the major product of the following reactions

21.

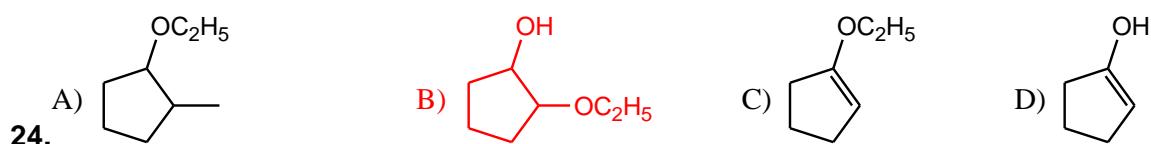
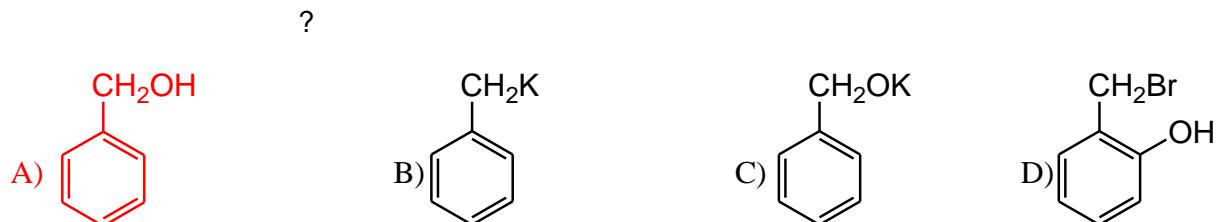


- A) 1,2-Dichlorobutane      B) 1,4-Dichlorobutane  
C) 1,1-Dichlorobutane      D) 2,2-Dichlorobutane
- 

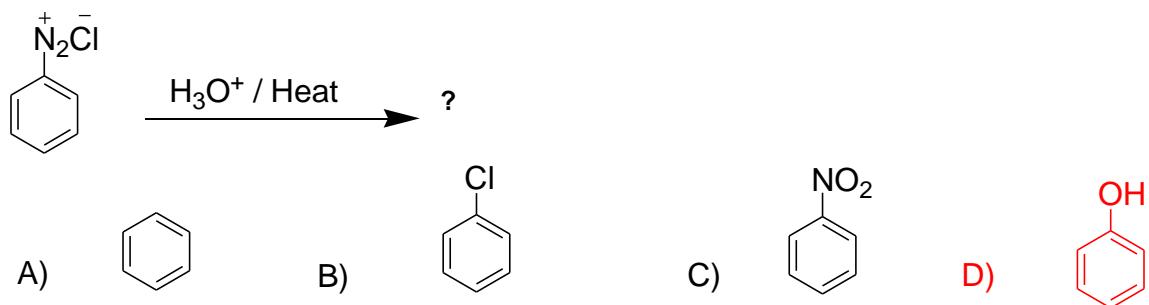
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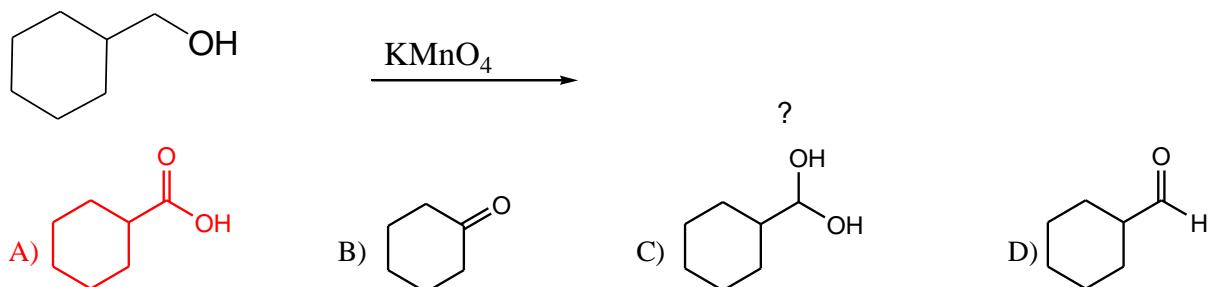
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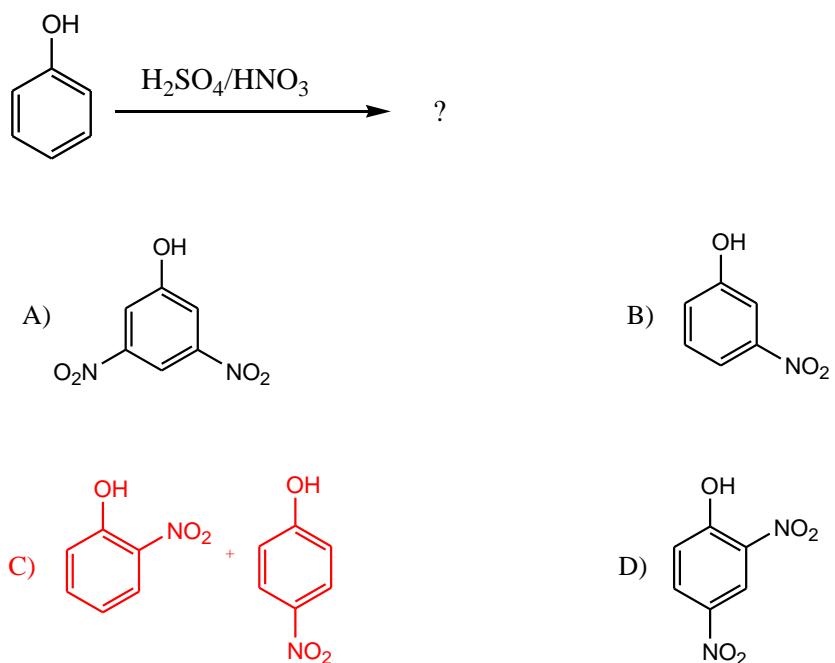
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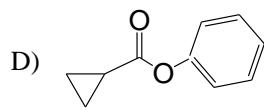
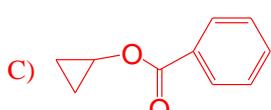
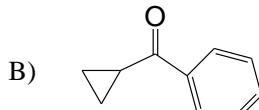
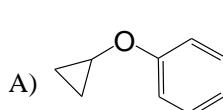
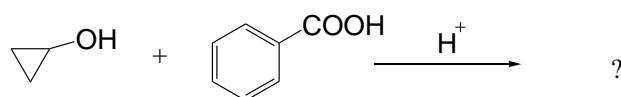
26.



27.



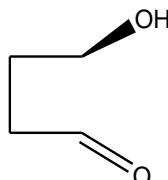
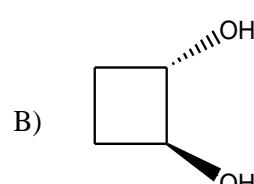
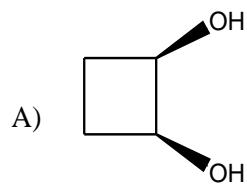
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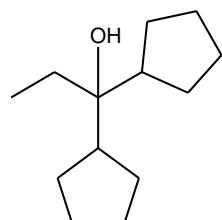
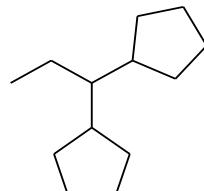
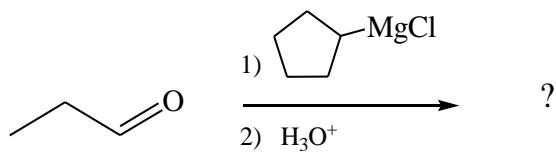
29.



is:



30.



Best Wishes