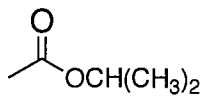


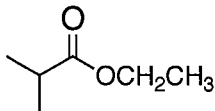
CEM143, Exam 3, Spring 2019

Pick The Most Accurate Answer For Each Question

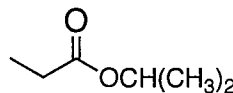
1. Which of the following compounds would be named as **isopropyl acetate**?



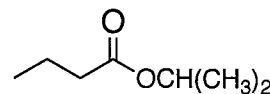
A



B

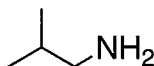


C

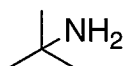


D

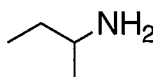
2. Which of the following compounds would be named as **sec-butylamine**?



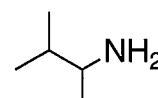
A



B

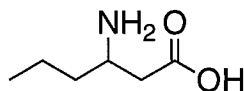


C

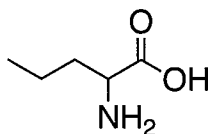


D

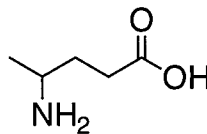
3. Which of the following compounds would be named as **3-aminopentanoic acid**?



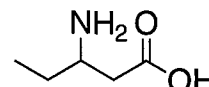
A



B

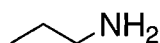
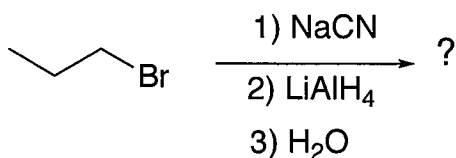


C

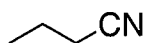


D

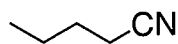
4. Which of the following is the correct product for the following reaction?



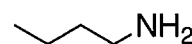
A



B

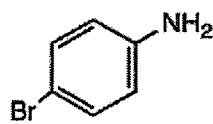


C

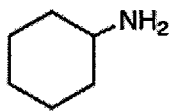


D

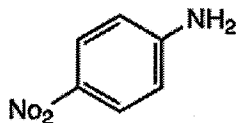
5. Which of the following compounds is the strongest base?



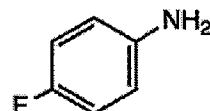
A



B



C

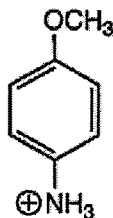


D

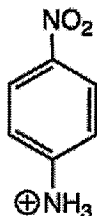
6. Which of the following compounds is the strongest acid?



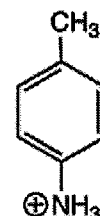
A



B

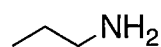


C

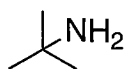


D

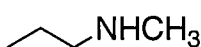
7. Which of the following compounds is a secondary amine?



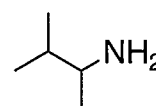
A



B

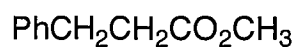


C

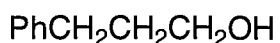


D

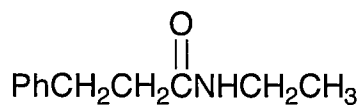
Use Figure 1 to answer questions 8 Thru 16.



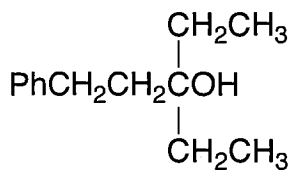
A



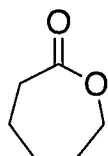
B



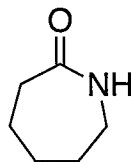
C



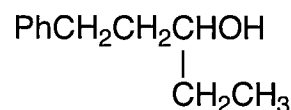
D



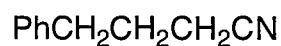
E



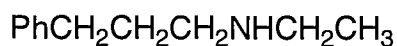
F



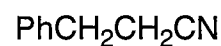
G



H



I



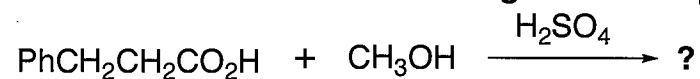
J

Figure 1

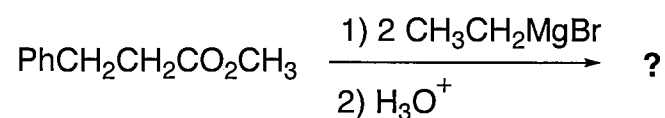
8. Which of the structures in **Figure 1** represents a **lactone**?

9. Which of the structures in **Figure 1** represents a **lactam**?

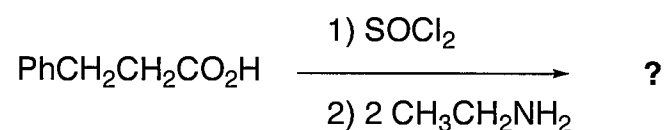
10. Which of the structures in **Figure 1** is the product for the following reaction?



11. Which of the structures in **Figure 1** is the product for the following reaction?



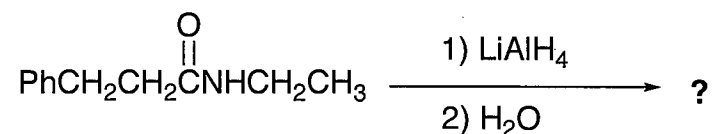
12. Which of the structures in **Figure 1** is the product for the following reaction?



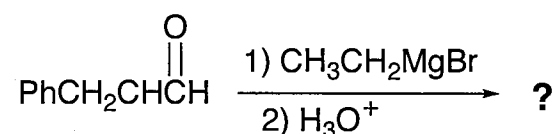
13. Which of the structures in **Figure 1** is the product for the following reaction?



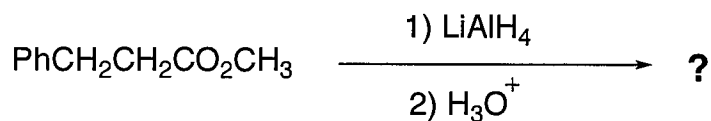
14. Which of the structures in **Figure 1** is the product for the following reaction?



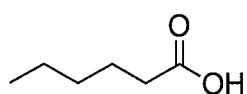
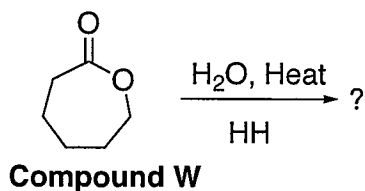
15. Which of the structures in **Figure 1** is the product for the following reaction?



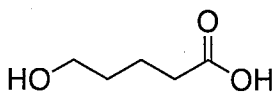
16. Which of the structures in **Figure 1** is the product for the following reaction?



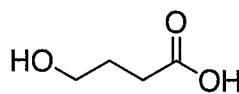
17. Which of the following represents the product of the hydrolysis of **Compound W**?



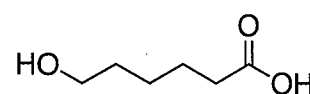
A



B

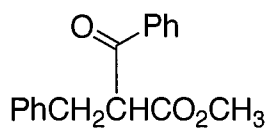
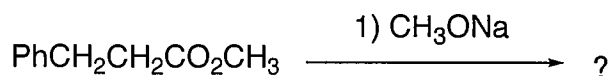


C

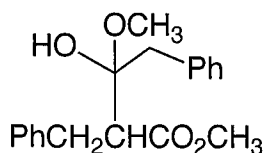


D

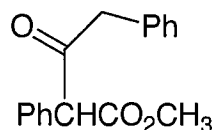
18. Which is the product of the following **Claisen reaction**?



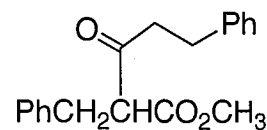
A



B

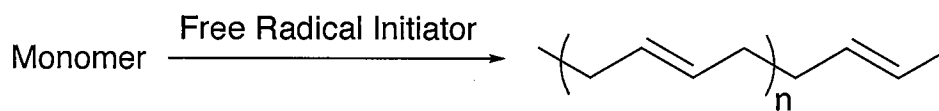


C

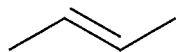


D

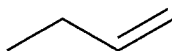
19. Which of the following is the monomer for **Polymer X** below?



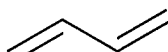
Polymer X



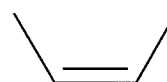
A



B

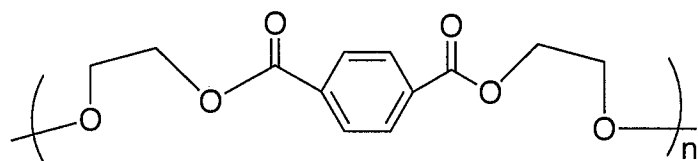


C

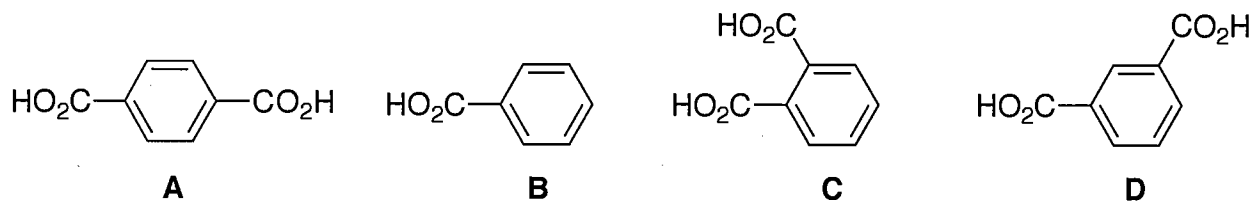


D

20. Which of the following dicarboxylic acids should be used to make Dacron?



Dacron



Use Figure 2 to answer questions 21 thru 25.

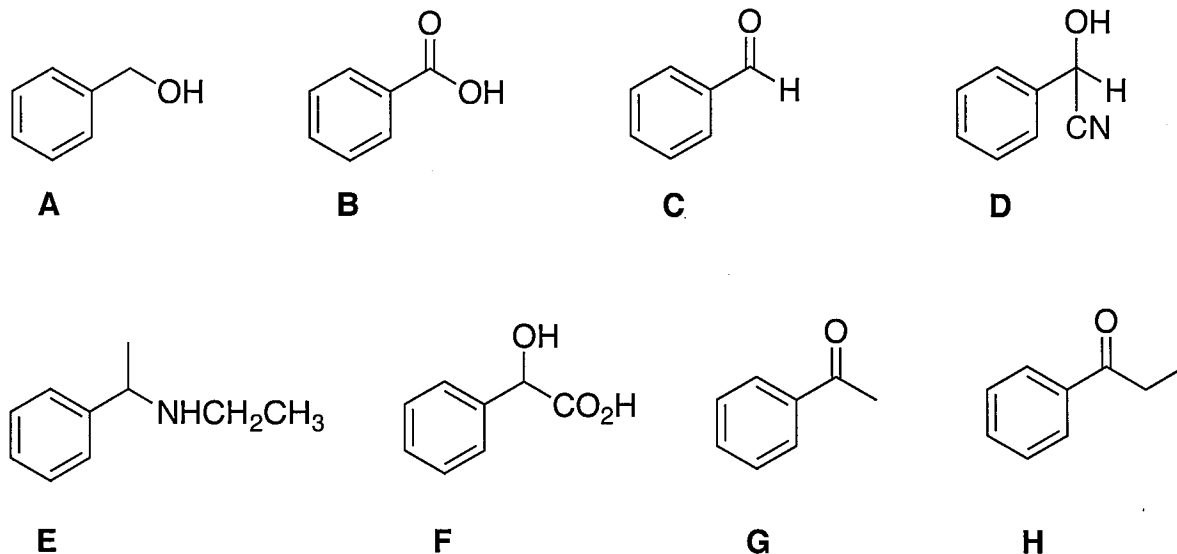
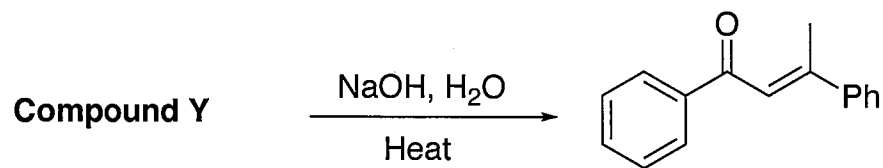
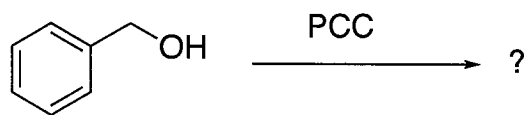


Figure 2

21. Which of the structures in Figure 2 represents **Compound Y** in the following **Aldol condensation** reaction?

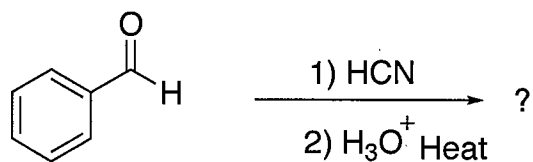


22. Which of the structures in **Figure 2** is the product for the following reaction?

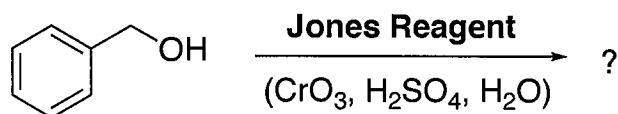


PCC = Pyridinium Chloro Chromate

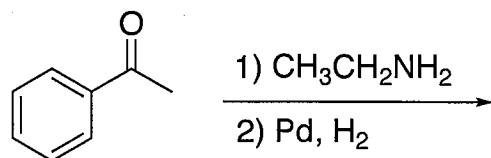
23. Which of the structures in **Figure 2** is the product for the following reaction?



24. Which of the structures in **Figure 2** is the product for the following reaction?



25. Which of the structures in **Figure 2** is the product for the following reaction?



CEM143, Exam 3, Spring 2019, Bonus Question (10 Points)

What is the name or structure of an initiator/catalyst suitable for a polymerization reaction of alkenes or dienes?