CHEM 2324 Exam 3 Name:

July 2, 2025 UTEP ID #:

If required, the exam retake homework will be due Friday, July 4, before noon through <http://organic.utep.edu/quiz>, no exceptions or excuses. Put your name on these sheets so that you can recover your class answers.

1.-5. Match each carbon centered part of the following molecule to the best functional group name on the right. Answers may be repeated. Charges are not shown.



1. 2. 3. 4. 5.

a. hemiacetal b. hemiaminal c. hemiketal d. acetal e. not a.-d.

6.-10. Match each set of reagents to a product to the right. Answers may be repeated. Assume any necessary workup.

1.  a. hexan-3-ol
2.  b. 2-methylpentan-1-ol
3.  c. 2-methylpentan-3-ol
4.  d. 3-methylpentan-3-ol
5.  e. not a.-d.

11.-15. Match each carbon centered part of the following molecule to the best functional group name on the right. Answers may be repeated. Charges are not shown.



11. 12. 13. 14. 15.

a. enamine b. enol c. enolate d. enol ether e. not a.-d.

16.-20. Match each set of reagents to a product to the right. Answers may be repeated. Assume any necessary workup.

1.  a. 
2.  b. 
3.  c. 
4.  d. 
5.  e. not a.-d.

21.-25. Match each carbon centered part of the following molecule to the best functional group name on the right. Answers may be repeated. Charges are not shown.



21. 22. 23. 24. 25.

a. nitrile b. ester c. anhydride d. amide e. not a.-d.

1. Which alkyl halide/carbonyl pair would be best to make the following alkene by the Wittig reaction? 

a. (keep salt) b. (keep salt)

c. (remove salt) d. (remove salt) e. not a.-d.