

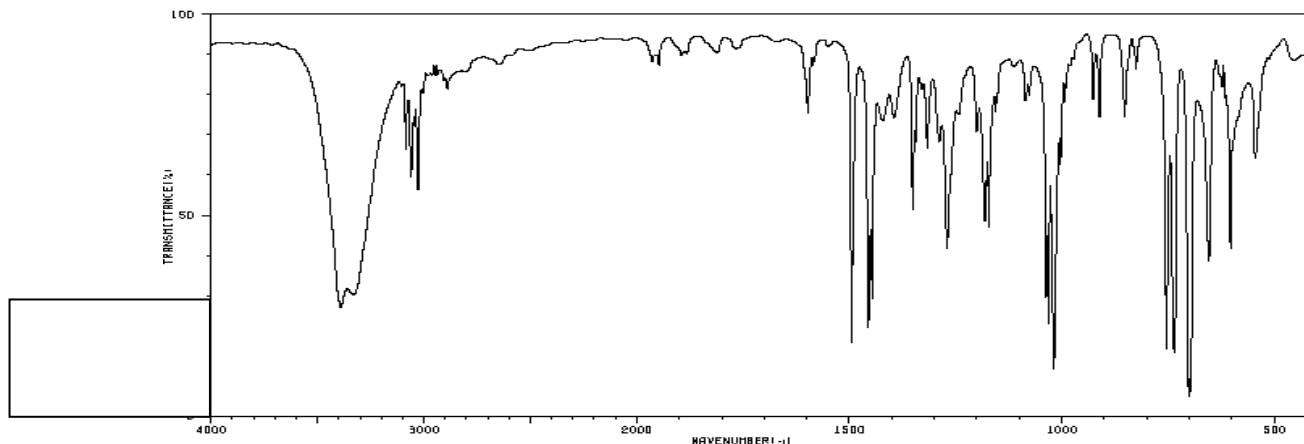
## Infrared Assignment Summer 2014

Name of Student: Student ID: Section:  
 TA: Mikhail Robert J. Robert T. Thomas Score: /40

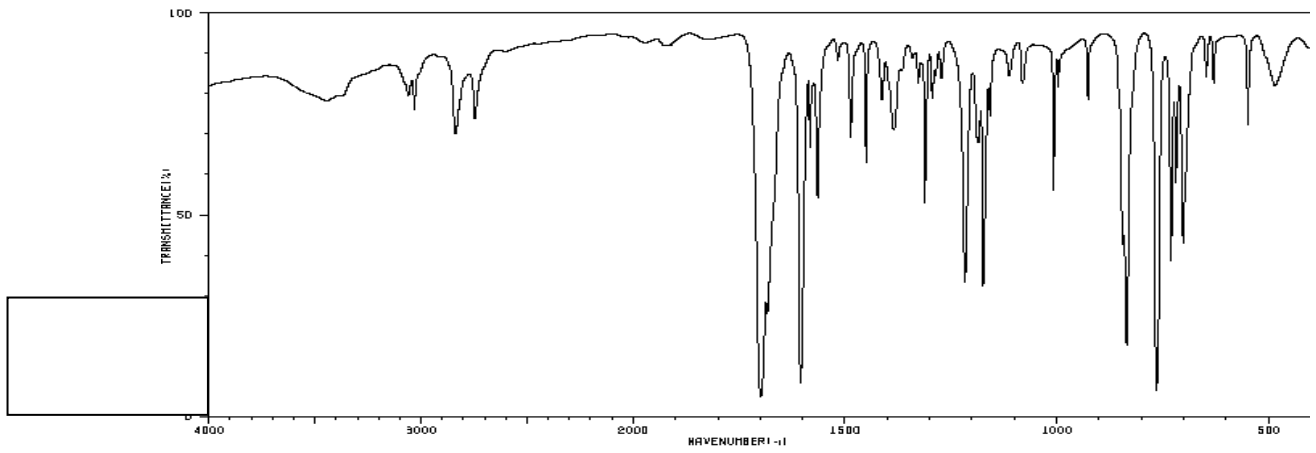
Identify the following spectra. Full credit is only given if all *pertinent* peaks are clearly assigned on the spectrum (~5-6 peaks). It is highly advisable to use the tables provided in the SKR (p. 198, 202, 212) to avoid getting confused by tables from different sources. Reviewing the lecture slides for the infrared workshops could not hurt either. You do not have to indicate the exact wavenumber of the peak. Print the entire assignment (=10 spectra) and turn in the entire package. Label the peaks on the spectrum and place the structure of the compound in the box on the lower left hand corner of the spectrum (from the table below, no numbering scheme). Leave the pages in order and do not print them out double-sided. Staple the assignment on the upper left corner. Circle your TAs name and make sure that you place your name, your student ID and section on the assignment. Messy assignments will not receive any credit. Neither will an assignment without a name! If you do not follow directions above, points will be deducted. The assignment is due by **Friday, August 15, 2014 at 4:30 pm** in your instructor's office (YH 3077E) or the grey mailbox in the office suite (on the right hand side when you enter the YH 3077 suite). **In fairness to all students in the course, no late assignments will be honored. Good luck!**

<chem>Nc1ccccc1N</chem>	<chem>Oc1ccccc1c2ccccc2</chem>	<chem>N#CC1CCCCC1</chem>	<chem>O=C1NC(=O)c2ccccc12</chem>
<chem>OC(=O)Cc1ccccc1</chem>	<chem>CS(=O)c1ccccc1</chem>	<chem>OC(=O)c1ccccc1c2ccccc2</chem>	<chem>C1=CC=CC=C1C2=CCCCC2</chem>
<chem>CCS(=O)(=O)c1ccccc1</chem>	<chem>O=Cc1ccc(cc1)-c2ccccc2</chem>	<chem>OC(=O)C1C(C(=O)O)C1C(=O)O</chem>	<chem>Nc1ccc(cc1)-c2ccccc2</chem>
<chem>OC(=O)Cc1ccccc1</chem>	<chem>Oc1ccc(cc1)[N+](=O)[O-]</chem>	<chem>Oc1ccccc1</chem>	<chem>Cc1c(C)cc(C)cc1C=O</chem>
<chem>O=C1OC(=O)c2ccccc12</chem>	<chem>NO2CCCC</chem>	<chem>CCCC#C</chem>	<chem>CC(C)CC(=O)N</chem>

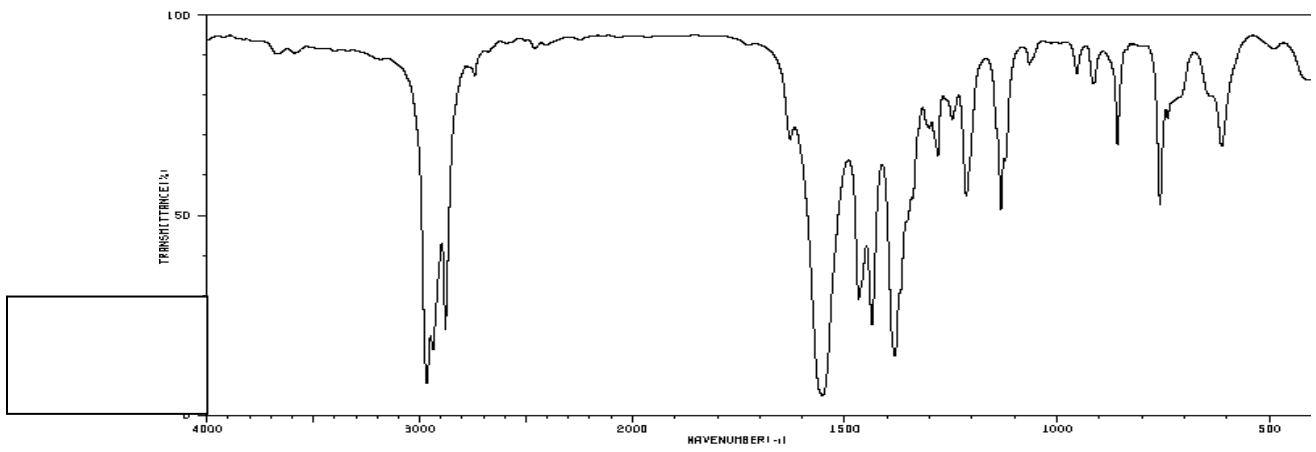
**Spectrum 1:**



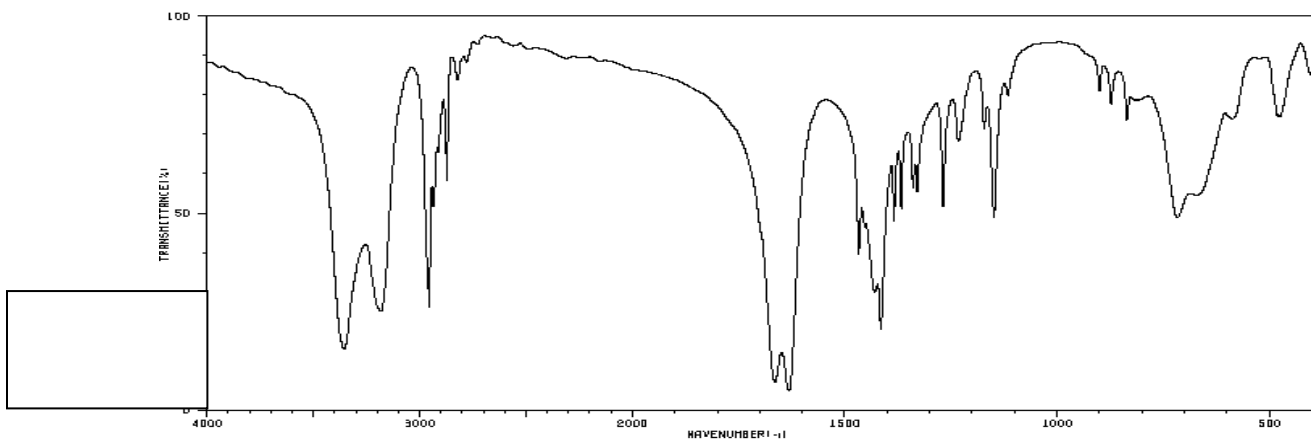
**Spectrum 2:**



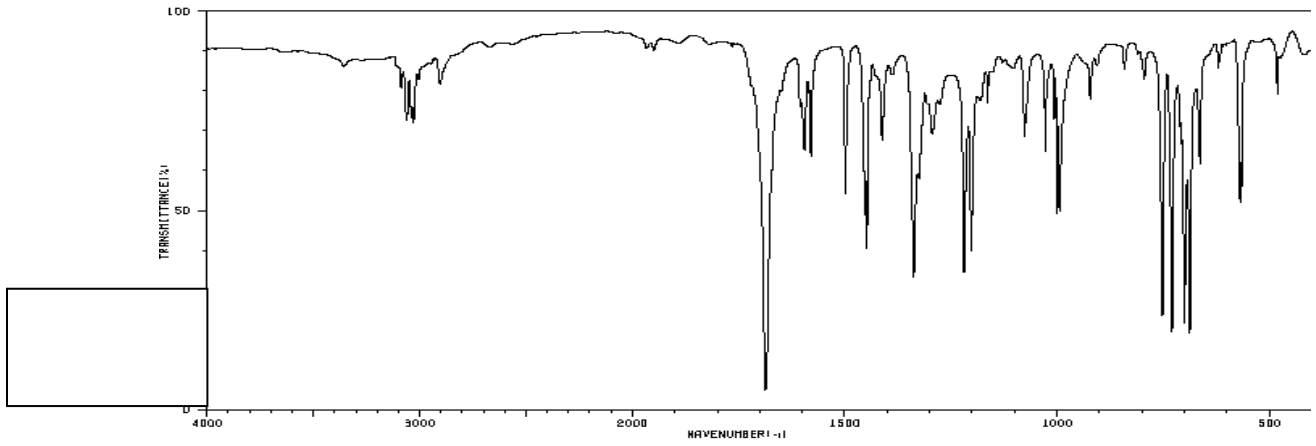
**Spectrum 3:**



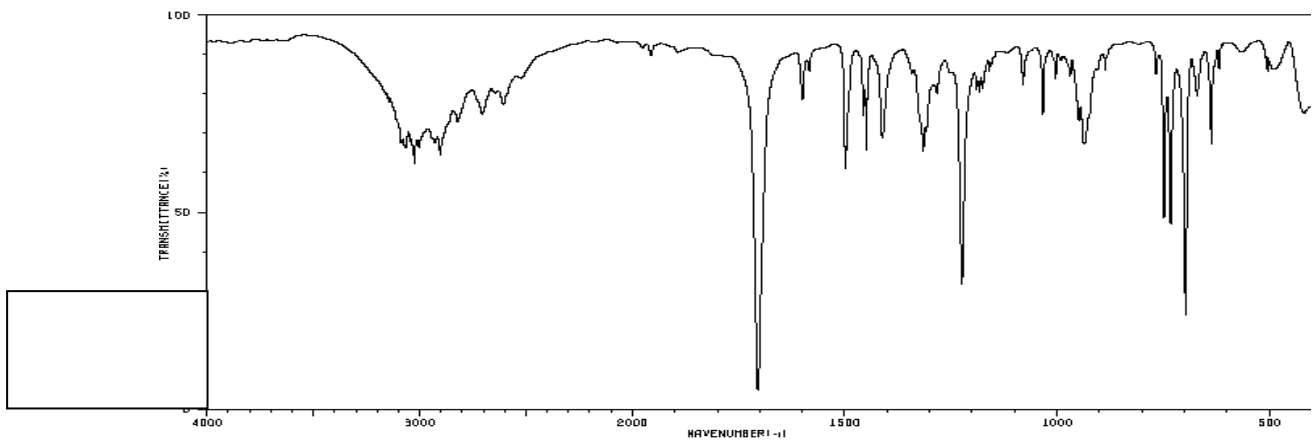
**Spectrum 4:**



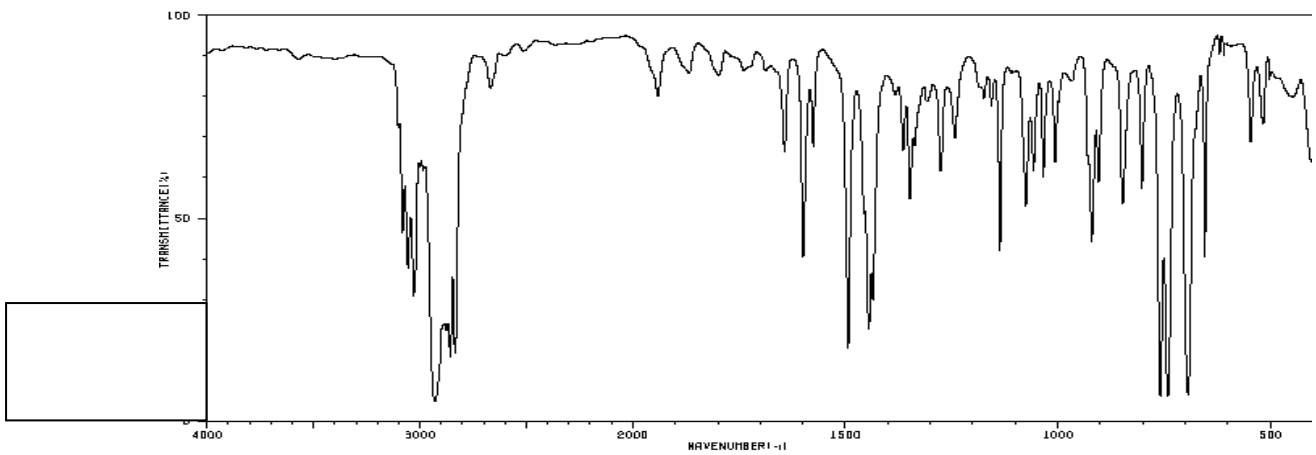
**Spectrum 5:**



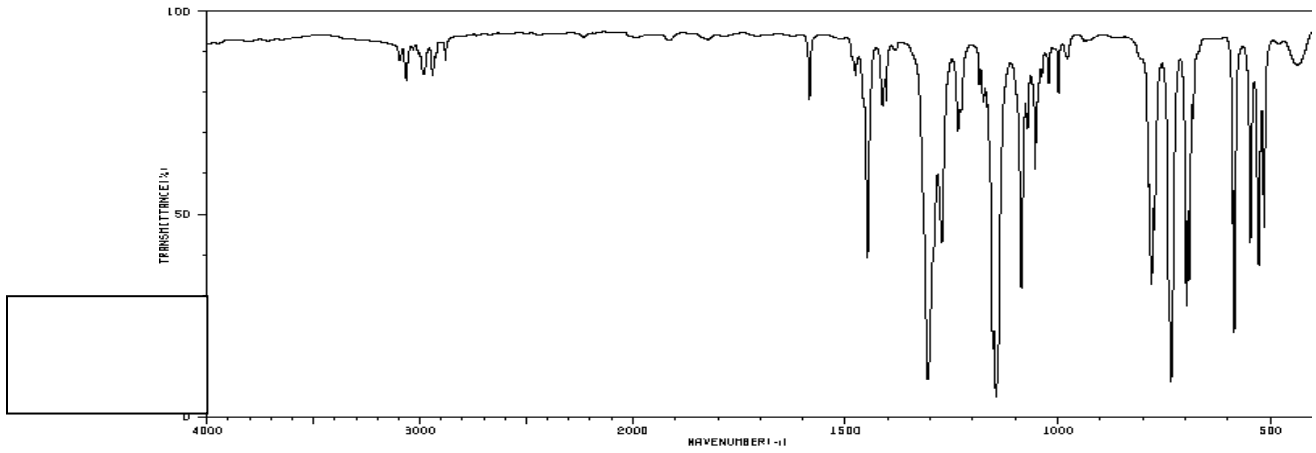
**Spectrum 6:**



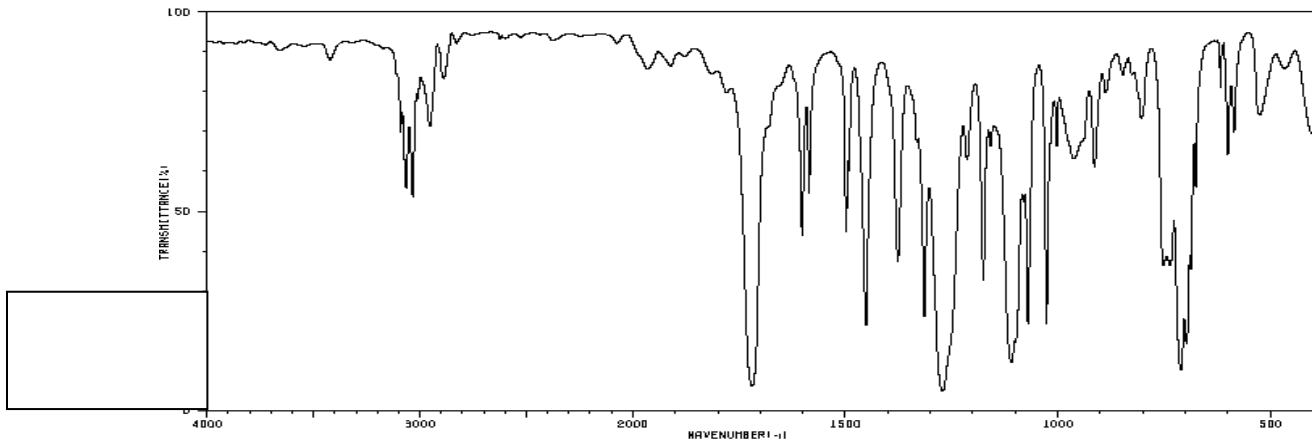
**Spectrum 7:**



**Spectrum 8:**



**Spectrum 9:**



**Spectrum 10:**

