

Name: \_\_\_\_\_

**Chem 4406: Molecular Spectroscopy Laboratory**

**Gas Chromatography/Mass Spectrometry Type I Report: \_\_\_\_\_ Score**

1) Purpose (5 points) \_\_\_\_\_

2) Introduction (5 points) \_\_\_\_\_

3) Block Diagram of Instrument (5 points) \_\_\_\_\_

4) Description of Instrument (5 points) \_\_\_\_\_

5) Theory (10 points)

a) Why the analyte give a signal (5 points) \_\_\_\_\_

b) Where the analyte signal arises from (5 points) \_\_\_\_\_

4) Procedure (20 points) \_\_\_\_\_

5) Results (25 points)

a) Include spectrum (5 points) \_\_\_\_\_

b) Label important ions in spectrum such as  $M^+$  and base peak (10 points) \_\_\_\_\_

c) Tabulate all data (10 points) \_\_\_\_\_

6) Discussion/Conclusion (25 points)

a) Attempt calculation of molecular formula and applying nitrogen rule (10 points) \_\_\_\_\_

b) Discuss your findings and make conclusions (15 points) \_\_\_\_\_

**TOTAL SCORE:** \_\_\_\_\_