

Name: _____

Chem 4406: Molecular Spectroscopy Laboratory

Gas Chromatography/Mass Spectrometry Type II Report: **Score**

- 1) Purpose (5 points) _____

- 2) Introduction (5 points) _____

- 3) Procedure for Unknown 1 (15 points) _____

- 4) Procedure for Unknown 2 (15 points) _____

- 5) Results for Unknown 1 (15 points)
 - a) Include spectrum of unknown 1 (3 points) _____
 - b) Label important ions in spectrum such as M^+ and base peak (6 points) _____
 - c) Tabulate all data (6 points) _____

- 6) Results for Unknown 2 (15 points)
 - a) Include spectrum of unknown 2 (3 points) _____
 - b) Label important ions in spectrum such as M^+ and base peak (6 points) _____
 - c) Tabulate all data (6 points) _____

- 7) Discussion & Conclusion (30 points)
 - a) Give possible structure or name of unknown 1 (5 points) _____
 - b) Unknown 1 calculation of molecular formula and applying nitrogen rule (5 points) _____
 - c) Give possible structure or name of unknown 2 (5 points) _____
 - d) Unknown 2 calculation of molecular formula and applying nitrogen rule (5 points) _____
 - e) Discuss your findings and make conclusions (10 points) _____

TOTAL SCORE: _____