

Criteria	Excellent	Good	Fair	Unacceptable
Overall appearance	[8 pts] Title page is properly formatted; appendix includes IR spectra and photocopy of notebook entry (including signatures)	[3 pts] Title page not properly formatted or appendix is missing an IR spectrum or notebook entry	[1 pt] Title page is not properly formatted or no appendix is attached	[0 pt] No title page and no appendix
Grammar, spelling and clarity	[2 pt] No obvious spelling or grammatical errors	[1 pt] Spelling errors exist but are not distracting; no grammatical errors	[0.5 pt] Obvious spelling errors and grammatical errors	[0 pt] Spelling and grammatical errors are distracting
QUESTION #1	[5 pts] Observed and literature values for melting point are included and tabulated, and sources are properly references	[3 pts] Observed and literature values (with sources) for melting point are included in the text, but not tabulated	[1 pt] Observed values for melting point are included, but literature values are not included or references are not given.	[0 pt] No answer
QUESTION #2	[5 pts] Isolated compounds are clearly identified (including structures) and proper structure elucidation techniques are cited (e.g., IR spectra)	[3 pts] Isolated compounds are clearly identified without proper structures, IR spectra are mentioned but key features are not properly labeled.	[1 pt] Isolated compounds are identified (no structures are included) without proper structure elucidation	[0 pt] No answer
QUESTION #3	[5 pts] Conditions for chromatography are clearly written (include stationary phase & mobile phase)	[3 pts] Conditions for chromatography do not include all of the conditions	[1 pt] Conditions for chromatography are not clearly written and do not include all of the conditions	[0 pt] No answer
QUESTION #4	[8 pts] The R_f values are calculated correctly and results are tabulated; order of migration in column and TLC are established; chemical structure (polarity) is included in the discussion	[5 pts] The R_f values are calculated but the results are not tabulated; order of migration in column and TLC are established; discussion of structure vs migration is incorrect	[3 pts] The R_f values are incorrectly calculated and results are not tabulated; order of migration in column and TLC are not established; discussion of structure vs migration has major flaws	[0 pt] No answer
QUESTION #5	[5 pts] Answer is accurate and clearly written	[3 pts] Answer is, in some way, inaccurate	[1 pt] Answer is contains major flaws or there is no clear argument	[0 pt] No answer
QUESTION #6	[7 pts] Solution separation is addressed, discussion of efficiency is accurate; problems are addressed and solutions proposed	[3 pts] Solution separation is addressed, discussion of efficiency is inaccurate or problems are not addressed	[1 pt] Solution separation is addressed, discussion of efficiency is inaccurate and problems are not addressed	[0 pt] No answer
QUESTION #7	[5 pts] Discussion of silica and alumina gels contain accurate descriptions of the chemical species and include accurate chemical & physical properties	[3 pts] Discussion of silica and alumina contain either incorrect descriptions of chemical species or include inaccurate chemical & physical properties	[1 pt] Discussion of silica and alumina contain both incorrect descriptions of chemical species & include inaccurate chemical & physical properties	[0 pt] No answer