**CHEM525 Chromatography Prelab Questions**

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

1. (3 points) List 3 different techniques that can be used for the chromatographic purification of proteins. Briefly describe the basis for each separation.
2. (2 points) Gel filtration chromatography is not usually a suitable initial technique to employ when purifying complex biological samples. Why do you think this is true?
3. (2 points) In one of the Fundamental Laboratory Approaches for Biochemistry and Biotechnology readings this week, the authors have a section entitled “Why you should never follow a seal act with a seal act”. What does this mean when applied to the purification of proteins?
4. (3 points) What is meant by the term “tag” when applied to a recombinant protein? Give 2 examples of tags that are commonly used to purify proteins and describe how they work (you’ll need to include the column type that you would use to purify the tagged protein in addition to the way that you would elute the tagged protein from that resin).