STA 3180 Statistical Modelling: Factor Analysis

I. Factor Analysis

A. Definition

1. What is factor analysis?

2. How is it used in statistical modelling?

B. Assumptions

1. What assumptions are necessary for factor analysis?

2. How do these assumptions affect the results?

C. Methods

1. What methods are used to conduct factor analysis?

2. How do these methods differ from other statistical modelling techniques?

D. Interpretation

1. How do you interpret the results of factor analysis?

2. What are the implications of the results?

Problem Solving Strategies:

1. Understand the assumptions and methods of factor analysis and how they differ from other statistical modelling techniques.

2. Be able to identify the appropriate method to use for a given data set.

3. Be able to interpret the results of factor analysis and understand the implications of the results.

4. Practice problem solving with factor analysis by working through example problems.

5. Utilize resources such as textbooks, online tutorials, and practice exams to gain a better understanding of factor analysis.