

STAT 5020: Topics in Multivariate Analysis

Final Examination

1. (60%) In Bayesian estimation:

- (a) (15%) Establish a SEM with mixed continuous, binary, count, and ordinal data.
- (b) (15%) Discuss model identifiability issues.
- (c) (15%) Derive the associated posterior distributions. 第五章
- (d) (15%) Describe the implementation of the posterior sampling.

2. (40%) In Bayesian model comparison:

- (a) (20%) Illustrate how to implement the path sampling procedure in computing Bayes factor in the context of multiple group SEMs.
- (b) (20%) Discuss other Bayesian model comparison statistics in the analysis of multigroup SEMs.