

國立雲林科技大學資訊管理系
111 學年度第 1 學期博士班資格考
科目：管理計量方法

時間：4 hours (Closed book)

作答時，請注意各題之比例配分，並清楚標示題號

Part A (50%)

1) Please design two experimental studies, one for using ANOVA and the other one for using MANOVA? Please explain the difference between the univariate ANOVA and the multivariate MANOVA. (10%).

2) Please explain the basic concept of factor analysis, and compare its analytic capability with discriminant analysis. (10%).

3) What are the specific steps in the analysis of moderation and mediation? How do you interpret the results from the regression analysis (10%).

4) The application of structure equation modelling (SEM) includes the measurement model and structural model. Please describe their assumptions and principles. (20%).

Part B (50%)

Please refer the paper “Assessing the success of e-government systems: An employee perspective” and answer the following questions

5) For the non-response bias tests (pp. 721), authors claimed that there is no bias effect across control groups, please **criticize** the presentation results from Table 2 (5%)

6) Based on the conceptual and result of research model (Figure 3, pp. 720 & Figure 4, pp. 723) and variables in final instrument (Appendix, pp. 724), please formulate the equations (measure and structural) (25%), in terms of LISREL notation (symbols), and transfer into matrix forms and mode (20%).