

**國立雲林科技大學資訊管理系**  
**110 學年度第 1 學期博士班資格考**

**科目：Research Method**

**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. According to Robert K. Yin, what is a case study? What are the steps of case study?  
10%
2. From case study research of Robert K. Yin, please write out four criteria for judging the quality of research design and explain their contents. 10%
3. Please read the journal paper, title “A data science and open source software approach to analytics for strategic sourcing”, and answer the following questions.
  - (1) What research method is employed in this paper? 10%
  - (2) What is the value of Kraljic Portfolio Matrix and the meaning of its results?  
10%
  - (3) Write out the disadvantages of this paper, and how do you improve this paper  
10%

**Part B 50%**

Please refer the paper entitled “Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems” and answer the following questions (50%)

- 1) How do the authors integrate their research model with a mixed-method design? What are the advantages and disadvantages of a mixed-method design? (10%).
- 2) Please describe the assumptions and principles when conducting a mixed-method design study (10%).
- 3) Use Table 4 as your reference, please explain the different aspects of validity in quantitative and qualitative research (10%).
- 4) Use Table 5 and Table 6 as your reference, construct a research with a mixed-method design. You have to apply mixed methods research guidelines in your study, and meta-inference must be built based on the logic flow presented in Figure 1 (20%).