

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

Part 1 (50%)

This part of the examination contains 5 multiple choice questions.

Each question is worth 10 points.

Mark all applicable responses for each question.

1.(10 points) Which of the following includes examples of categorical variables?

- (a) age, height, weight
- (b) education level, anxiety level, reading performance
- (c) gender, religion, ethnic group
- (d) None of the above

2.(10 points) A school district examines a program that uses mentors to help very poor readers improve their reading performance. The duration of the mentoring program is for one academic year. The children in the program are at or below the 3th percentile at pretest. At post-test they are around the 15th percentile.

While it is possible that the program made the difference, other reasons for the change in reading performance could be:

- (a) Maturation effect
- (b) Regression effect
- (c) Multiple-treatment interference
- (d) Selection bias

3. (10 points) A researcher argues that the p-value obtained from significance testing could be used to assess how strong a relationship is.

For example, if comparing mean reading performance between a sample of males and females yields a p-value of 0.049 while comparing mean mathematics performance between the same sample of males and female yields a p-value of 0.011, then one can conclude that gender and mathematics performance is more strongly related than that for gender and reading performance.

- (a) The researcher's statement is correct
- (b) The researcher's statement is wrong
- (c) The scores must follow normal curves for the researcher's argument to hold true.
- (d) None of the above

4. (10 Points) Which of the following are not common characteristics of an experiment:

- (a) it can draw conclusions on cause and effect among treatments and outcomes
- (b) it rarely is conducted in a controlled setting or environment
- (c) it uses both deductive and inductive scientific methods
- (d) it relies on the collection of quantitative measurement

5. (10 points) When evaluating tests and assessments, reliability refers to which of the following questions?

- (a) Do they give consistent responses?
- (b) Do they measure what they are supposed to measure?
- (c) Do they measure multiple traits on a single dimension?
- (d) Are there ways to avoid subjective judgments and be objective?

Part 2

解釋名詞 (20%，每題 5 分，請依題號順序回答)

1. 研究派典 (research paradigm)
2. 關鍵報導人 (key informant)
3. 滾雪球 (snowball sampling)
4. 資料飽和 (saturation)

Part 3

申論題 (30%)

1. Creswell 與 Plano Clark (2011) 提出三種基本的混合研究設計。請說明有哪三種方法？並請針對每種方法的設計分別作詳細的說明。(15%)
2. 請提出 3 個質性研究的特質，並加以詳細說明。(15%)