※ 考生請注意:本試題不可使用計算機　　　請勿在本試題紙上作答,否則不予計分

一、The following 10 multiple-choice questions are worth 5 points each.
Select one or more correct options for each question.

1. The essential ingredient of scientific observation is
    (a) control
    (b) precise instrumentation
    (c) description
    (d) creating change

2. What characteristic distinguishes scientific hypotheses from casual, everyday hypotheses?
    (a) testability
    (b) intuitive appeal
    (c) circularity
    (d) certainty

3. When a researcher studies an individual differences variable, the levels of the independent variable are
    (a) manipulated
    (b) averaged
    (c) dependent
    (d) selected

4. When a study is free of confoundings it is said to have
    (a) external validity
    (b) internal validity
    (c) integrity
    (d) reproducibility

5. The results of an externally valid study are ones that
    (a) apply to a narrow range of subjects, conditions, and settings
    (b) apply to a wide range of subjects, conditions, and settings
    (c) are likely to replicate if the study is repeated
    (d) are likely to be difficult to interpret unambiguously

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6. In which of the following survey research designs is the focus on
describing the characteristics of a population or the differences between
two or more populations at a certain point in time?

   (a) cross-sectional design
   (b) successive independent samples design
   (c) longitudinal design
   (d) accidental samples design

7. Which of the following factors does not influence the reliability of a
measure of students' understanding of course material?

   (a) the way in which the measure is administered (e.g., whether the instructions are clear
   and the testing situation is free of distractions)
   (b) how much the individuals differ in their understanding of the material
   (c) number of items used to measure students' understanding of the material
   (d) how much discriminant validity the measure of understanding has from other measures,
   such as intelligence

8. The systematic error variation due to differences among participants
is _____ in the statistical analysis of repeated measures designs.

   (a) balanced
   (b) corrected
   (c) *eliminated*
   (d) increased

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9. Which of the following threats to internal validity arises when participants
   are selected for treatment because they score particularly high on a less than
   perfectly reliable test?

   (a) instrumentation
   (b) testing
   (c) convergence
   (d) regression

10. The problem of selection bias in survey techniques, in which the researcher's
    procedures determine who is likely to be included in a sample, is similar to
    the problem of _____ in archival records.

    (a) selection threat
    (b) sampling distinctions
    (c) selective deposit
    (d) running records

二、請解釋下列各究法相關名詞，並舉例說明之。（每一題 5 分，共 25 分）
1. 壓抑變項（Suppressor variable）
2. 固定樣本資料（Panel data）
3. 立意抽樣（Purposive sampling）
4. 假性相關（spurious relation）
5. 世代研究（Cohort study）

三、行為科學研究主要在瞭解事實的真相，新聞報導也是在追尋事實的真相。試
舉出兩者間在探討事實真相時，最少三項差異之處？並討論行為科學研究在瞭解
事實真相過程中的「系統性質疑」？又如何達到？（共 25 分）