

## M2 Key answers of Research Methodology Exam

Question one: Give **succinct** answers to the following questions. **(in clear and short way)**

(06pts)

1. **Research can be inductive or deductive. Explain.**

Research can be inductive when hypotheses are generated in qualitative research while it can be deductive when it focuses on testing hypotheses such as in experimental design.

2. **How can you test validity and reliability of a questionnaire?**

Questionnaire validity can be tested by experts or using a software (Pearson correlation) whereas reliability may be tested by Cronbach alpha coefficient.

3. **What should you consider if you decide to use an observation?**

We should consider what to observe, the degree of structure of the observation, the context, its duration, the timing, the choice of the appropriate recording and whether

4. **Suppose you intend to use a test statistics in your study, what should you take into consideration?**

Statistical tests are used based on the type of data, the number of variables, the sample and whether the population is normally distributed or not.

5. **Which statistical test can you use for ordinal data?**

The Mann-Whitney U test./ Wilcoxon/ Friedman/ Kruskal-Wallis **(one is enough)**

6. **Which questions should be avoided in constructing a questionnaire? (name four)**

Leading questions, negative constructions, double-barrelled questions, ambiguous and loaded words and sentences, items that are likely to be answered in the same way by everybody should be avoided.

Question two: **Coding is an important phase in analyzing the data obtained from a semi-structured interview. Explain briefly the steps to be followed in that phase.** (03pts)

The steps to be used in coding the data from a semi-structured interview include open coding in which the text is broken into discrete parts, then selective coding where connections are made between the codes. This

*is followed by selective coding where the researcher identifies a core category which is the central theme of the research.*

*A short answers ( 2 sentences or 3 ): Open coding/ axial coding and selective coding.*

*Question three: What is the difference between experimental research and correlational research ? (03pts)*

*Both experimental research and correlational research are quantitative. However, the former manipulates an independent variable to test its effect on a dependent variable while the former aims to find out if there is a relationship between variables; its direction ( whether it is positive or negative) and its strength.*

*Question Four : Write a paragraph in which you compare thematic analysis and content analysis (08pts)*

*Scoring : 4 pts for the content/ 2 for the organization/ 2 for the language*

*1. Topic sentence*

*2. Definition*

*2. Similarities*

*Differences*

*3. Concluding sentences*

*Best wishes*