

## S1 Exam in Research Methodology

### Activity 1: Circle the correct answer(s) (14 pts).

1/ A sociolinguist notices that researchers working on childhood bilingualism rely on different research tools and sample sizes, making direct comparison difficult. Before designing a new small-scale study, the researcher must decide the sequence of research steps. Which sequence best reflects proper research methodology? **2 pts**

- a. Submit for ethical approval → Identify the research problem → Formulate research question → Design measurement instruments → Conduct literature review.
- b. Design methodology based on literature insights → Conduct comprehensive literature review → Communicate the results with the scientific community → Formulate refined research question → Identify the research problem.
- c. **Formulate preliminary research question → Conduct targeted literature review → Refine research question based on findings → Design methodology → Develop instruments based on existing validated measures**
- d. None of the above.

If your choice is *d*, write the appropriate answer:

2/ Which of the following is the most comprehensive criterion for judging whether a research question is 'worth asking'? **2 pts**

- a. **It logically follows from the stated problem and yields data that can address it.**
- b. It is broad enough to cover multiple unrelated variables and concepts.
- c. It is unoperationalized and abstract
- d. None of the above.

If your choice is *d*, write the appropriate answer: .....

3/ When choosing a theory that informs your study, you need to make sure that it: **2 pts**

- a. **is falsifiable and testable**
- b. **deals with some significant phenomenon that needs explanation.**
- c. a & b

d. None of the above. If your choice is *d*, write the appropriate answer: .....

4/ A "good" research problem must satisfy all of the following except that: **2 pts**

- a. It should be significant and lead to further research.
- b. It should be researchable through data collection.
- c. It should be ethically appropriate.
- d. **it should guarantee statistically significant results.**

5/ Which statement correctly contrasts probability sampling and non-probability sampling? **2 pts**

- a. Non-probability sampling ensures that every member has an equal chance to be sampled, whilst probability sampling does not.

- b. Both rely on chance to determine inclusion of participants, but probability sampling is more amenable to sampling error.
- c. In stark contrast to probability sampling, non-probability sampling seeks to ensure a high degree of representativeness and generalizability.
- d. **None of the above**

**6/ A decision on what to research can arise from many wellsprings of the researcher's own motivation, such as: (2 pts)**

- a. **A topical concern in the field 0.5 pts**
- b. **disquiet with a particular research finding that one has met in the literature 0.5 pts**
- c. **a wish to apply a piece of conceptual research to actual practice or to test out a specific methodology 1 pt**
- d. all of the above (also applicable) / in you case you opted for option d, you would get the full mark (2 pts)**

**7/ Which statement most accurately captures the fundamental aspects of research objectives? 2 pts**

- a. research objectives are broad, abstract, and unoperationalized statements.
- b. research objectives determine what follow in respect of the kind of research, the research questions, the research design, data collection tools, and the sampling method**
- c. a & b
- d. all of the above

**Activity 2: In this activity, you will read a series of illustrative short paragraphs that describe different research scenarios. Identify the type of sampling strategy used in each scenario (6 pts.)**

Scenarios	Sampling Strategy
<i>In order to study the dialects spoken in Oum El Bouaghi speech community, a sociolinguist divides the city into neighborhoods. He randomly selected three large rural regions and interviewed every speaker willing to participate in those areas.</i>	Cluster sampling 1 pt
<i>A researcher wants to examine the speaking proficiency of students across all EFL classes in a university. She assigned each student a number and used a random number generator to select 80 students from the entire student population.</i>	Simple random sampling 1 pt
<i>Two Algerian researchers set the task to evaluate the effectiveness of Data-driven approach in enhancing EFL learners' lexical awareness. They divided the student population by proficiency levels (beginner, intermediate, advanced) and then randomly selected students from each group to participate in the study.</i>	Stratified random sampling 1 pt
<i>A researcher is interested in the language attitudes of high school students towards the use of AI tools in academic writing. She decides to survey students from one school by selecting every 5th student listed on the school roster until she reaches her desired sample size.</i>	Systematic sampling 1 pt
<i>Three researchers conducting a survey on dynamics of language shift among Algerian immigrant families in the UK decided to interview parents who rear bilingual children in London city. They chose these particular families based on their cultural background, immigration history, and the number of languages spoken in home context.</i>	Purposive (judgment) sampling 2 pt

**GOOD LUCK**