

FIRST TERM TEST IN RESEARCH METHODOLOGY

Last/ Family Name	First Name	Group	Marks/20

KEYS

Task One: Are the following statements true (T) or false (F)? Insert T/F in the space provided. (2/2)

1. F. Type I errors are always less important than Type II errors in hypothesis testing.
2. F. The independent variable receives the impact of the dependent variable.
3. T. Whilst quantitative scholars use the term "research", the qualitative researchers utilize "inquiry".
4. F. Nonprobability sampling is based on randomization.

Task Two: Read the definitions on the right and insert the right terms in the space provided. (2/2)

1. **Nomothetic Research:** This research seeks general principles and patterns applicable to groups.
2. **Ontology:** Strictly speaking, it is the philosophical study of being. In the most basic sense, this question inquires about what can be known. In other words, it refers to your view of reality and to what extent it exists "out there", to be captured through research.
3. **Epistemology:** It is the theory of knowledge and deals with how knowledge is gathered and from which sources. Specifically, it is concerned with possibilities, nature, sources and limitations of knowledge in the field of study. Alternatively, it can be explained as the study of the criteria by which the researcher classifies what does and does not constitute the knowledge.
4. **Ideographic Research:** This research focuses on understanding individuals in their unique context. It aims to uncover specific, individualized factors and experiences.

Task Three: (a.) Examine the students' marks in the grid below: (2/2)

A	B	C	D	E	F	G	H	I	J	K	L	M
7.5	14	11	9.5	12	16	7.5	7	14.5	18	8	10	13

- a. Re-ordering the raw data in an ascending fashion, from the lowest to the highest.

H	A	G	K	D	L	C	E	M	B	I	F	J
7	7.5	7.5	8	9.5	10	11	12	13	14	14.5	16	18

b. Calculate:

1. The Mean: **11.38**
2. The Median: **11**
3. The Mode: **7.5**
4. The Range: **11**.

Task Four: Compare and contrast the pairs of concepts in the space provided. (4/4)

1. **Pure Research vs. Applied Research:**

Research could be of two categories: Pure or Basic and Applied. Whilst pure/basic research is concerned with expounding knowledge for knowledge's sake, applied research endeavors to apply research findings to dispense practical solutions.

2. **Stratified Sampling vs. Quota Sampling:**

Both stratified and quota sampling split the population into subgroups and select the subjects according to certain characteristics such as age, gender, socioeconomic status, etc. Whereas stratified sampling randomly selects the samples from every stratum, quota sampling, which is nonprobabilistic, selects subjects from predetermined number, i.e., quota.

3. **Inductive Reasoning vs. Deductive Reasoning:**

The scientific reasoning is either inductive or deductive. Inductive reasoning is bottom-up approach to identifying generalizations (namely, rules) from specific observations (namely, examples). It is basically inferential in that it infers generalizations. On the other hand, deductive reasoning refers to top-down approach to reach inferences based on facts. It moves from generalizations to examples.

4. **Assumption vs. Hypothesis:**

Assumptions and hypothesis are both statements about reality. While assumptions state truths, hypotheses state tentative guesses that once tested they could be accepted or fail to be accepted.

Task Five: Re-write the following assumptions into workable quantitative hypotheses. (4/4)

1. EFL learners who regularly read in the target language, i.e., English, write essays that are more efficient:
 - *If EFL learners regularly read in the target language, i.e., English, they will write essays that are more efficient.*
2. EFL learners with low self-esteem tend to cheat more in term papers:
 - *It is predicted/ hypothesized that EFL learners with low self-esteem tend to cheat more in term papers.*
 - *If EFL learners tend to cheat more in term papers that is probably due to their low self-esteem.*
3. EFL left brainers excel in writing argumentative essays:
 - *It is hypothesized/ predicted that EFL left brainers excel in writing argumentative essays.*
 - *If EFL learners are left brainers, they will excel in writing argumentative essays.*
4. Open-book examinations such as take-home exams significantly reduce test anxiety:
 - *If open-book examinations such as take-home exams are implemented in EFL classes, test anxiety will significantly be reduced.*
 - *It is predicted/ hypothesized that open-book examinations such as take-home exams are implemented in EFL classes, test anxiety will be significantly reduced.*

Task Six: Write as instructed. (4/4)

1. **A Directional Null Hypothesis:**

- *If EFL teachers do not allow a measure of humor in their classes, students will be less engaged in in-class activities.*

2. **A Nondirectional Null Hypothesis:**

- *It is hypothesized that reading classical literature in the target language does not involve the enhancement of critical thinking.*

3. **A Nondirectional Alternative Hypothesis:**
 - *If EFL learners listen to English pop songs, they will be able to use colloquial expressions in appropriate socio-cultural contexts.*
4. **A Directional Alternative Hypothesis:**
 - *It is predicted that the more EFL learners are engaged in collaborative activities, the more they tend to enhance their interpersonal skills.*

Task Seven: *Explain in your own words. (2/2)*

1. **Systematic Random Sampling:**
 - *Researchers attribute a number to each subject of a population and then select every kth subject. It should be noted that from the first subject to the kth number, the selection must be random, and then systematically select the kth subject.*
2. **Cluster Random Sampling:**
 - *Researchers split the population into clusters or groups then randomly select some clusters and use all the subjects of the cluster.*
3. **Snowball Sampling:**
 - *A nonprobability sampling method that is based on subjects selecting other subjects who share the same features and interests. Networking and referral are two features of snowball sampling where each sample invites willing participants to take part in the research*
4. **Purposive Sampling:**
 - *Also known as judgmental sampling reposing on the researcher's decision what needs to be identified or researched and starts finding subjects who fit the researcher's needs and expectations.*

End of Term Paper Test (2/2)