

بنام خدا

دانشگاه آزاد اسلامی واحد کرج



نمره

نمره تجدید نظر

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PART ONE: TRUE-FALSE ITEMS

Put a cross in the box corresponding to the correct answer.

- | | T | F |
|---|--------------------------|--------------------------|
| 1 Research is of two types: confirmatory and exploratory. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 Exploratory research builds on already existing knowledge. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 According to Popper, knowledge falls into three different universes. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 Soft sciences try to become hard through quantification. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 Theorizing is a way of interpreting, and unifying established generalizations. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 The ultimate goal of deductive and inductive theories is explanation. | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 Norms of coherence in theorizing can be defined as "the question of how the parts of a research relate to each other and to the whole." | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 Research is inseparable from theory. | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 According to Karl Raimund Popper (1959), the more complicated the theory, the less it says—because it becomes all the more difficult to falsify. | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 Law of instrument in research simply says that if you give a small boy a hammer, he will find that everything he encounters needs pounding. | <input type="checkbox"/> | <input type="checkbox"/> |
| 11 Heuristic or Hypothesis-Testing Studies include attempts in which the investigator begins his task with specific hypotheses based on his personal hunch, the findings of previous research, or a theory, and sets out to test those hypotheses to evaluate their truth or falsity. | <input type="checkbox"/> | <input type="checkbox"/> |
| 12 A theory is flexible, pliant, and heuristic. | <input type="checkbox"/> | <input type="checkbox"/> |
| 13 In Popper's view of science, World 3 knowledge is nothing other than laws and facts. | <input type="checkbox"/> | <input type="checkbox"/> |
| 14 Hypothetical constructs derive their meaning from the whole theory in which they are embedded and from their role in the theory. | <input type="checkbox"/> | <input type="checkbox"/> |
| 15 Mystique of quantity says that numbers have no magical powers; they do not have scientific value in and of themselves. | <input type="checkbox"/> | <input type="checkbox"/> |
| 16 Descriptive research collects data either spontaneously or through various elicitation procedures. | <input type="checkbox"/> | <input type="checkbox"/> |
| 17 There is no one scientific method. | <input type="checkbox"/> | <input type="checkbox"/> |
| 18 Experimental Studies consist of attempts made to manipulate certain variables "experimentally" to determine their effect(s) on certain other variables. | <input type="checkbox"/> | <input type="checkbox"/> |
| 19 Experimental research (in the laboratory) is the <i>sine qua non</i> for establishing the validity of an hypothesis. | <input type="checkbox"/> | <input type="checkbox"/> |
| 20 There is no single scientific truth. | <input type="checkbox"/> | <input type="checkbox"/> |

PART TWO: SAMPLING PRACTICE

Read the scenario below and fill in the boxes that follow.

In a research study, you decide to draw a sample of 11 subjects from a population of 5000 people. In order to make your sampling completely bias-free, you decide to use a random number table, and you select only the following field from the table.

45	86	25	10	25
96	11	96	38	96
33	35	13	54	62
83	60	94	97	00
77	28	14	40	77

You decide to move down the field in pairs, and at the same time copy the numbers that represent the selected subjects in the following table....

PART THREE: DATA SCALE IDENTIFICATION

The table on page three tabulates the four scales of data, and identifies their characteristics. Your job is to complete the table by identifying the binary values (±) of the data scales in the context of the features listed by the table.

	NOMINAL	ORDINAL	INTERVAL	RATIO
NAMING				
ORDERING				
EQUAL DISTANCE				
ABSOLUTE ZERO POINT				

PART FOUR: MULTIPLE-CHOICE ITEMS

Read the following scenario and answer the questions that follow.

A researcher decides to study the effects of stress on EFL students at Islamic Azad University of Karaj. The population includes 1150 members with the following composition:

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR
15%	35%	40%	10%

The researcher wishes to draw a sample of 150 subjects. To this end, he uses the following formula:

$$\frac{S}{\sum R} \times T = P$$

- What is the number of subjects that are sampled from among the junior students?

60 70 80 90
- What is the number of subjects that are sampled from among the senior students?

10 15 20 25

3) What is the number of subjects that are sampled from among the freshman students?

- 23 33 43 53

4) What is the number of subjects that are sampled from among the sophomore students?

- 42 52 62 72

5) Which method of randomization has been used by the researcher?

- Simple random sampling Stratified random sampling
 Cluster random sampling Sampling by the use random number tables

PART FIVE: RESEARCH DESIGN IDENTIFICATION

Each of the following five schemes represents one of the designs used in experimental, quasi-experimental, or true experimental research. Put a cross in the box that identifies the type of research to which the scheme belongs.

1) Design number one:

	independent variable	post-test
EG	X	T ₂

- pre-experimental
 quasi-experimental
 true experimental

2) Design number two:

	pre-test	independent variable	post test
R EG	T ₁	X	T ₂
R CG	T ₁	-----	T ₂

- pre-experimental
 quasi-experimental
 true experimental

3) Design number three:

	pre-test	independent variable	post test
EG	T ₁	X	T ₂
CG	T ₁	-----	T ₂

- pre-experimental
 quasi-experimental
 true experimental

4) Design number four:

	pre-test	independent variable	post-test
EG	T ₁ , T ₁ , T ₁	X	T ₂ , T ₂ , T ₂

- pre-experimental
 quasi-experimental
 true experimental

5) Design number five

	pre-test	independent variable	post test
R EG1	T ₁	X	T ₂
R CG1	T ₁	-----	T ₂
R EG2	-----	X	T ₂
R CG2	-----	-----	T ₂

- pre-experimental
 quasi-experimental
 true experimental

GOOD LUCK!