

1- In social science research, ----- data usually employs descriptive words such as few, small, large, happy.

1. qualitative
2. quantitative
3. statistical
4. experimental

2- The mean of scores in a vocabulary test is 38 and the standard deviation is 4. Assuming that the scores have a normal distribution, the proportion of scores that fall between 34 and 42 is about .....

1. 34%
2. 13%
3. 50%
4. 68%

3- In a test of Grammar, the scores of students are: 12, 10, 11, 13, 11, 12, 15, 12, 15, 11, 13, 11  
The median of these scores is .....

1. 15
2. 12.5
3. 11
4. 12

4- In ----- interview, a set of questions is prepared in advance and consistently asked from the respondents.

1. unstructured
2. structured
3. random
4. direct

5- Content or ----- validity enables the researcher to check the correspondence between the content of the test and the content of the materials to be tested.

1. concurrent
2. predictive
3. construct
4. curricular

6- Which of the following is NOT among the different ways of establishing the reliability of a test?

1. Rational equivalence
2. Instrumentation bias
3. Split half
4. Test-retest

7- In a(n) ----- scale, each response is associated with a point value and the individual's score is determined by summing the point values for each statement.

1. nominal
2. ordinal
3. Likert
4. interval

8- Which of the following is one of the most frequently used association techniques?

1. Rorschach inkblot test
2. Structured interview
3. Quasi-experimental test
4. Closed questionnaire

9- Another name that is used instead of relative frequency is -----.

1. percentage
2. inventory
3. proportion
4. reliability

- 10- A researcher obtains ----- by adding up the absolute frequencies successively from the bottom to the top.
1. collective frequency
  2. relative frequency
  3. simple frequency
  4. cumulative frequency
- 11- In a typical presentation of a polygon, the most frequent score which is the peak is called -----.
1. median
  2. mode
  3. mean
  4. range
- 12- When relative frequency is multiplied by 100, outcome is the -----.
1. absolute frequency
  2. percentile
  3. cumulative frequency
  4. percentage
- 13- A percentile rank of 55 indicates that 54 percent of scores are ----- that rank.
1. both above and below
  2. above
  3. below
  4. either above or below
- 14- When the frequency of high scores is more than that of low scores, the distribution is said to be -----.
1. negatively skewed
  2. positively skewed
  3. a bimodal distribution
  4. a flat distribution
- 15- Consistency of the obtained scores on a test refers to the ----- of the test.
1. maturation
  2. validity
  3. randomization
  4. reliability
- 16- Representativeness criterion requires that the sample reflect the characteristics of the -----.
1. cluster
  2. inventory
  3. population
  4. researchers
- 17- The variance equals to the ----- the standard deviation.
1. square of
  2. square root of
  3. interval difference of
  4. adjusted difference of
- 18- The difference between the highest and the lowest scores in the distribution is called -----.
1. mean
  2. median
  3. deviation
  4. range

19- Measures of central tendency and variability are necessary pieces of information about the ----- of scores.

1. reliability
2. validity
3. distribution
4. directory

20- In research data analysis, ----- refers to one piece of information in the data which does not contribute to the computations.

1. degrees of freedom
2. central tendency
3. variability
4. range

21- The asymptotic property of a normal distribution is that the tails of the curve ----- the horizontal line.

1. sometimes meet
2. never meet
3. may cross
4. must cross

22- The Z score is obtained by taking into account the mean and the ----- of the raw scores.

1. standard deviation
2. central tendency
3. normal distribution
4. derived score

23- In order to convert raw scores into more meaningful scores, ----- is needed.

1. a reference scale
2. a reference collection
3. a percentile rank
4. a mean deviation

24- How the study was conducted explained within the ..... of the journal article.

1. conclusion
2. discussion
3. material
4. procedure

25- When observed values are obtained, the researcher should check them against ----- values.

1. population
2. critical
3. sample
4. standard

26- The concept of "degrees of freedom" is important in t-test because it -----.

1. provides an accurate number of subjects
2. makes the sample seem more random
3. determines the shape of the score distribution
4. smoothes out the shape of the t distribution

27- Which term is used to shorten the data without losing any important piece of information?

1. elaborating
2. collecting
3. analyzing
4. summarizing

28- In the matched t-test formula, the difference between every pair of scores is called -----.

1. adjusted score
2. corrected score
3. deviation score
4. nominal score

29- With large sizes, the value of t -----.

1. is drastically different from that of Z
2. is almost identical to that of Z
3. must be used instead of Z
4. must be used along with Z value

30- It is recommended that the raw scores be transformed into standard scores in order to make them -----.

1. comparable
2. sealed
3. desirable
4. specific

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**1-All of the following are among the sources of obtaining information BUT -----.**

- |                       |              |
|-----------------------|--------------|
| 1. Sensory experience | 2. Cognition |
| 3. Expert opinion     | 4. Logic     |

**2-In the following kind of reasoning, the first sentence is called -----.**

**All men are mortal.**

**Hossein is a man.**

**Hossein is mortal.**

- |          |            |              |              |
|----------|------------|--------------|--------------|
| 1. axiom | 2. premise | 3. principle | 4. inference |
|----------|------------|--------------|--------------|

**3-A systematic approach to answering questions is called -----.**

- |                    |                  |                  |             |
|--------------------|------------------|------------------|-------------|
| 1. experimentation | 2. qualification | 3. randomization | 4. research |
|--------------------|------------------|------------------|-------------|

**4-Generalizations arrived at from observed events are called -----.**

- |                        |                        |
|------------------------|------------------------|
| 1. deduction           | 2. generalization      |
| 3. inductive inference | 4. reasoning technique |

**5-As a practical phenomenon, ----- refers to reducing researchers' responsibility.**

- |                  |                     |              |                |
|------------------|---------------------|--------------|----------------|
| 1. systematicity | 2. generalizability | 3. atomistic | 4. reductivity |
|------------------|---------------------|--------------|----------------|

**6-Which of the following refers to exact or partial replication of previous research to consolidate already discovered facts? ..... research.**

- |                |                 |                |            |
|----------------|-----------------|----------------|------------|
| 1. Explanatory | 2. Confirmatory | 3. Theoretical | 4. Applied |
|----------------|-----------------|----------------|------------|

**7-A tentative statement about the outcome of research is called -----.**

- |                |             |               |               |
|----------------|-------------|---------------|---------------|
| 1. probability | 2. variable | 3. hypothesis | 4. experience |
|----------------|-------------|---------------|---------------|

**8-When researchers try to utilize the outcome of research in everyday life, they are performing ----- research.**

- |         |              |            |            |
|---------|--------------|------------|------------|
| 1. pure | 2. classroom | 3. teacher | 4. applied |
|---------|--------------|------------|------------|

**9-A systematic group of courses or sequence of subjects required for graduation or certification in a major field of study is called -----.**

- |               |             |           |            |
|---------------|-------------|-----------|------------|
| 1. curriculum | 2. syllabus | 3. course | 4. program |
|---------------|-------------|-----------|------------|

**10-The defense system one builds around himself is called -----.**

- |                |               |               |                |
|----------------|---------------|---------------|----------------|
| 1. self-esteem | 2. inhibition | 3. inhabitant | 4. self-denial |
|----------------|---------------|---------------|----------------|



11- In order to select a particular theory of language teaching methodology, it is necessary to -----

1. pretest it
2. simplify the materials
3. adapt it
4. observe the restrictions

12- The most important factor in asking a research question is the -----.

1. context of study
2. interest of the researcher
3. characteristics of subjects
4. popularity of research subjects

13- Which of the following type of research questions are asked to find out the frequency, duration, and the intensity of an event?

1. Descriptive
2. Correlational
3. Cause-effect
4. Explanatory

14- Which of the following qualifies as a good research question?

1. Why should government finance English classes?
2. Does the audio-lingual method lead to a higher achievement of language abilities than the cognitive method?
3. Is it important to read fast?
4. Why is language learning so important?

15- All of the following are considered as goals of literature review EXCEPT -----.

1. Helping research on the topic within a scientific perspective
2. Avoiding mere duplication of previous research
3. Avoiding inadequacies of previous research
4. Motivating participants to answer honestly

16- Literature review often starts after -----.

1. data collection
2. finding the area of research
3. data analysis
4. formulating the question

17- A researcher who has some information about the topic should go to -----.

1. an encyclopedia
2. reference books
3. a newspaper
4. dictionaries

18- An operational definition of a variable deals with the variable in terms of -----.

1. contextual factors
2. its measurable characteristics
3. participants' characteristics
4. researcher's interest

**19- Which of the following scale types has a true score point?**

- 1. Nominal
- 2. Ordinal
- 3. Interval
- 4. Ratio

**20- The variable that the researcher observes and measures to determine the effect of the instruction is called -----variable.**

- 1. dependent
- 2. independent
- 3. intervening
- 4. moderator

**21- The variable that stands between the independent and dependent variables is called ----- variable.**

- 1. moderator
- 2. intervening
- 3. continuous
- 4. discrete

**22- The relationship between the independent and dependent variables is that of -----.**

- 1. scale – function
- 2. cause – effect
- 3. testing – teaching
- 4. measured – unmeasured

**23- Which of the following statements is INCORRECT about historical research?**

- 1. It helps researchers to make suggestions for future state of affairs.
- 2. It helps researchers to understand the causes and effects.
- 3. It enables researchers to reevaluate the data in relation to certain hypotheses.
- 4. It uses measurement in the sense of scientific research.

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**24- External criticism is performed in order to check the ----- of the document.**

- 1. reliability
- 2. truthfulness
- 3. authenticity
- 4. source

**25- Descriptive methods can be classified into all of the following groups EXCEPT -----method.**

- 1. Survey
- 2. Interrelational
- 3. Correlational
- 4. Developmental

**26- When researchers are interested in observing the behaviors that occur at the end of a specific time interval within the duration of an event, they are advised to employ ----- sampling.**

- 1. continuous time
- 2. time point
- 3. nonrandom
- 4. random

**27- Which of the following methods of research often employs questionnaires for data collection?**

- 1. Survey
- 2. Interrelational
- 3. Case
- 4. Cross-sectional

**28- Whatever happens to the subjects of the study outside the experimental environment is called -----.**

- 1. history
- 2. placebo
- 3. background
- 4. side effect



**29- Which of the following refers to any process that involves systematic changes over time regardless of specific events?**

- 1. Puberty
- 2. Development
- 3. Maturation
- 4. Acquisition

**30- The results of the pre-experimental method of research are subject to the problems of ----- validity.**

- 1. internal
- 2. external
- 3. both internal and external
- 4. neither internal nor external

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**1-The reservations that researchers should observe during data collection are referred to -----.**

- |           |               |          |              |
|-----------|---------------|----------|--------------|
| 1. ethics | 2. principles | 3. codes | 4. privacies |
|-----------|---------------|----------|--------------|

**2-Which of the following refers to the process through which every single member of population is given an equal chance to be included in the sample?**

- |             |               |              |                  |
|-------------|---------------|--------------|------------------|
| 1. Sampling | 2. Clustering | 3. Selection | 4. Randomization |
|-------------|---------------|--------------|------------------|

**3-Which of the following sampling methods takes the proportion of subjects in the population into account?**

- |                      |                      |
|----------------------|----------------------|
| 1. Simple random     | 2. Systematic random |
| 3. Stratified random | 4. Cluster           |

**4-The major problem with closed-form questionnaires is that -----.**

1. they are neither reliable nor valid
2. the responses are not uniform
3. they take away the respondents' freedom in answering
4. according to researchers they are easy to construct

**5-Which of the following is the main drawback of using indirect method for distributing questionnaires?**

- |                              |                            |
|------------------------------|----------------------------|
| 1. Low return rate           | 2. Response uniformity     |
| 3. Accessing the respondents | 4. Construction difficulty |

**6-Which of the following validity enables the researcher to check the correspondence between the content of the test and the content of the materials to be tested?**

- |               |               |            |         |
|---------------|---------------|------------|---------|
| 1. Predictive | 2. Concurrent | 3. Logical | 4. Face |
|---------------|---------------|------------|---------|

**7-The instruments to obtain information on one or more aspects of an individual's behavior rather than measuring those aspects are called -----.**

- |              |          |                |          |
|--------------|----------|----------------|----------|
| 1. batteries | 2. tests | 3. inventories | 4. silos |
|--------------|----------|----------------|----------|

**8-The way the data are coded will depend, in part, on the -----.**

- |                                     |  |
|-------------------------------------|--|
| 1. method of conducting research    | 2. scales used to measure the variables  |
| 3. theories underlying the research | 4. interpretations of the collected data |

**9-The number of times a particular score has occurred in the data is called ----- frequency.**

- |             |             |               |               |
|-------------|-------------|---------------|---------------|
| 1. absolute | 2. relative | 3. cumulative | 4. stratified |
|-------------|-------------|---------------|---------------|

**10- When relative frequency is multiplied by 100, the outcome is called -----.**

- 1. T score
- 2. percentile
- 3. percentage
- 4. Z score

**11- Percentile scores show the rank of the subjects on a scale of -----.**

- 1. 100
- 2. 10
- 3. 50
- 4. 150

**12- Bimodality in a distribution implies that -----.**

- 1. collected data are valid
- 2. researcher has not used suitable method
- 3. there are two distinct groups in the sample
- 4. subjects are homogenous

**13- When most of the scores in a distribution are low and only a few are high, the distribution is most likely to be -----.**

- 1. flat
- 2. positively skewed
- 3. normal
- 4. negatively skewed

**14- In order to avoid lengthy addition of the scores in formulas, the Greek letter sigma is used which means ----- all values coming after.**

- 1. subtract
- 2. multiply
- 3. delete
- 4. add

**15- Describing the data refers to a set of procedures which lead to -----.**

- 1. achieving a conclusion
- 2. interpreting the data
- 3. finding certain figures
- 4. selecting calculation procedures

**16- Which of the following is defined as the most frequently obtained score in the distribution?**

- 1. Range
- 2. Mode
- 3. Mean
- 4. Median

**17- Which of the following represents the main advantage of the median?**

- 1. It is not sensitive to extreme scores.
- 2. It is frequently calculated.
- 3. It is affected by middle scores.
- 4. It can be calculated manually.

**18- Variation of scores is considered as the distance of scores from the -----.**

- 1. median
- 2. central point
- 3. mode
- 4. all of the above

**19- One of the uses of measures of variability is to enable the researcher to -----.**

- 1. check the accuracy of computations
- 2. see the scatteredness of the scores
- 3. make inferences from sample to population
- 4. observe the accuracy of the measurement

20- In a range type of index variability, the most important pieces of information include the ----- scores.

1. high and low
2. highest and the lowest
3. more deviant
4. distance between

21- All of the following present nearly the same or similar values in a bell-shaped curve EXCEPT -----.

1. Mode
2. Mean
3. Median
4. Variance

22- What percentage of scores falls between 0 SD and +1SD in a normal distribution curve?

1. 13.59%
2. 50%
3. 68.26%
4. 34.13%

23- Paper-based TOEFL is measured on a scale with a mean of ----- and standard deviation of -----.

1. 100 – 500
2. 50 – 10
3. 500 – 100
4. 10 – 50

24- What does the third column, C, present in the Table of Proportion of Areas under the Normal Curve?

1. The proportion of the particular value of Z
2. The proportion of scores beyond a particular Z value
3. The proportion of scores between the mean and the Z value
4. The proportion of scores below a particular Z value

25- The main reason for converting raw scores into standard scores is that -----.

1. raw scores should be converted to normal scores
2. percentiles are more meaningful than raw scores
3. measurement scales should be comparable
4. raw scores are not meaningful

26- Raw scores might be misleading because they -----.

1. are not compared with a criterion
2. may not be easily obtained
3. are not based on the same tests
4. may not be on comparable scales

27- Any characteristic determined through inferential statistics is called a -----.

1. statistic
2. parameter
3. variable
4. digit

**28- Formally speaking, the probability of an event is the proportion of ----- to -----.**

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. possible outcomes – desired events | 2. desired events – possible outcomes |
| 3. possible events – desired outcomes | 4. certain outcomes – general events  |

**29- To determine the extent of error, scholars have made an agreement on two levels of errors: five percent and one percent. Technically these are called levels of ..... ?**

- |                 |                  |               |                |
|-----------------|------------------|---------------|----------------|
| 1. significance | 2. determination | 3. importance | 4. association |
|-----------------|------------------|---------------|----------------|

**30- To compute any single parameter in an equation, ----- pieces of information are required.**

- |        |            |            |            |
|--------|------------|------------|------------|
| 1. $N$ | 2. $N + 1$ | 3. $N - 2$ | 4. $N - 1$ |
|--------|------------|------------|------------|



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26	د
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28	ب
29	الف
30	د

**1- When a researcher selects every nth subject from a population, he is using -----.**

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. simple random sampling     | 2. systematic random sampling |
| 3. stratified random sampling | 4. cluster sampling           |

**2- The data obtained from non-random samples are not as ----- as the data obtained from random samples.**

- |             |             |          |               |
|-------------|-------------|----------|---------------|
| 1. reliable | 2. relevant | 3. valid | 4. applicable |
|-------------|-------------|----------|---------------|

**3- According to the literature, all of the following are among the major rights that should be considered in ethics EXCEPT -----.**

- |              |            |                    |            |
|--------------|------------|--------------------|------------|
| 1. Anonymity | 2. Privacy | 3. Confidentiality | 4. Secrecy |
|--------------|------------|--------------------|------------|

**4- Which of the following refers to the degree to which a test consistently measures whatever it measures?**

- |                |             |              |            |
|----------------|-------------|--------------|------------|
| 1. Reliability | 2. Validity | 3. Relevance | 4. Utility |
|----------------|-------------|--------------|------------|

**5- When a researcher presents an individual with a series of pictures and requires him to tell a story about each picture, he is using -----.**

- |                           |                               |
|---------------------------|-------------------------------|
| 1. Rorschach inkblot test | 2. Thematic Appreciation Test |
| 3. story-telling test     | 4. puzzle test                |

**6- Which of the following can simply be calculated by dividing the absolute frequency by the total number of scores?**

- |                       |                         |
|-----------------------|-------------------------|
| 1. Relative frequency | 2. Percentile           |
| 3. Simple frequency   | 4. Cumulative frequency |

**7- To obtain more detailed information on the standing of a particular score within a group of scores, one should calculate -----.**

- |                         |                       |
|-------------------------|-----------------------|
| 1. standard deviation   | 2. relative frequency |
| 3. cumulative frequency | 4. degree of freedom  |

**8- If most of the scores are high and a few scores are low, the peak of distribution will fall toward the ----- side of the graph.**

- |         |          |           |         |
|---------|----------|-----------|---------|
| 1. left | 2. right | 3. middle | 4. tail |
|---------|----------|-----------|---------|

**9- If the frequency of the obtained scores is almost the same for all scores, the distribution would be -----.**

- |                      |            |
|----------------------|------------|
| 1. positively skewed | 2. bimodal |
| 3. negatively skewed | 4. flat    |

10- Which of the following is defined as the most frequently obtained score in the distribution?

1. Mean
2. Median
3. Mode
4. Range

11- If the distribution of scores is symmetric, all of the following measure tend to be quite similar BUT -----.

1. Mode
2. Mean
3. Median
4. Standard deviation

12- Which of the following is the most commonly used measure of variability of scores in a distribution?

1. Range
2. Variance
3. Standard Deviation
4. Degree of freedom

13- A disadvantage of using the mean is that -----.

1. it is sensitive to the extreme scores
2. it balances scores
3. it equates scores
4. it is sensitive to deviations

14- The variance equals to ----- the standard deviation.

1. the square of
2. the square root of
3. the sum of squared deviations from
4. the sum of deviation scores from

15- According to the literature, normal distribution is all of the following EXCEPT -----.

1. unimodal
2. symmetric
3. asymptotic
4. skewed

16- In order to obtain the Z score, one should take into account ----- of the raw scores.

1. mean and median
2. mean and standard deviation
3. mean and variance
4. median and standard deviation

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17- What percentage of scores falls below zero SD in a normal distribution?

1. 50
2. 84
3. 34
4. 13

18- When raw scores are converted to some sort of standard scores, the scores taken from ----- can be compared meaningfully.

1. distributions with similar means
2. Z and normal distributions
3. different distributions
4. distributions with similar variabilities

19- It is recommended that raw scores be transformed into standard scores in order to make them -----.

1. comparable
2. sealed
3. desirable
4. specific

20- Any characteristic determined through inferential statistics is called -----.

- 1. statistic
- 2. parameter
- 3. variable
- 4. factor

21- A head or a tail in flipping a coin and a true or false response in performing on a true-false item is called a(n) -----.

- 1. outcome
- 2. event
- 3. accident
- 4. instance

22- In order to quantitatively determine the probability of a score belonging to a distribution, the raw score should be converted into a -----.

- 1. Z score
- 2. probable score
- 3. meaningful score
- 4. normal score

23- According to the Z distribution, the percentile rank of a score corresponding to a Z of +2 is -----.

- 1. 100
- 2. 34
- 3. 50
- 4. 98

24- If the probability of the occurrence of a particular value is less than 5 in one hundred or less than one in a hundred, it is claimed that the value -----.

- 1. belongs to the distribution
- 2. does not belong to the distribution
- 3. is the representative of the population
- 4. is a critical value

25- The process of ----- the data is NOT mentioned as a function of descriptive statistics.

- 1. organizing
- 2. depicting
- 3. interpreting
- 4. tabulating

26- In a two-tailed test, the researcher can expect the difference between the samples to go -----.

- 1. in either direction
- 2. in one direction only
- 3. twice as much as in a one-tailed test
- 4. as much as in a one-tailed test

27- According to the literature, t-test is usually used to compute the difference between ----- means.

- 1. three
- 2. more than two
- 3. more than three
- 4. two

28- The two factors which determine the degrees of freedom are the number of -----.

- 1. samples and the number of subjects
- 2. formulas and the number of subjects
- 3. population parameters and formulas
- 4. sample statistics and the number of subjects

**29- Which of the following sections is NOT included in the method section of the research paper?**

- |             |           |              |            |
|-------------|-----------|--------------|------------|
| 1. Subjects | 2. Design | 3. Materials | 4. Results |
|-------------|-----------|--------------|------------|

**30- In which section of an article, does the author describe what the subjects did or what was done to the subjects during the research project.**

- |           |               |              |               |
|-----------|---------------|--------------|---------------|
| 1. Method | 2. Discussion | 3. Procedure | 4. Conclusion |
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