

سری سوال : یک ۱

زمان آزمون (دقیقه): تستی : ۱۲۰ تشریحی : ۰

تعداد سوالات : تستی : ۳۰ تشریحی : ۰

عنوان درس : زبان تخصصی

رشته تحصیلی / کد درس : آمار، ریاضیات و کاربردها ۱۱۱۷۰۳۰

**1-Descriptive statistics..... .**

1. is the number of times a score
2. is reasoning from the general to the specific
3. is a method of proving theorem
4. expresses some particular characteristic of a set of data

**2-One definition of ..... is that it is a method of taking chance factors into account when you use samples to reach conclusions about populations.**

- |                          |                              |
|--------------------------|------------------------------|
| 1. parametric statistics | 2. non-parametric statistics |
| 3. mean                  | 4. inferential statistics    |

**3-What is the main purpose of the following paragraph?**

The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample.

- |                              |                           |
|------------------------------|---------------------------|
| 1. importance of sample size | 2. importance of sample   |
| 3. importance of population  | 4. importance of the goal |

**4-The arrangement of score values from high to low and the frequency of each score is called.**

- |                 |                           |
|-----------------|---------------------------|
| 1. observation  | 2. frequency distribution |
| 3. distribution | 4. frequency              |

**5-A subset of population is .... .**

- |         |              |           |               |
|---------|--------------|-----------|---------------|
| 1. data | 2. frequency | 3. sample | 4. covariance |
|---------|--------------|-----------|---------------|

**6-..... is a technique of reaching unknown amount about population.**

- |              |                |          |                   |
|--------------|----------------|----------|-------------------|
| 1. inference | 2. calculation | 3. ANOVA | 4. data reduction |
|--------------|----------------|----------|-------------------|

**7-Which probability distribution is appropriate for a count of events when the events of interest occur randomly, independently of one another and rarely?**

- |           |            |             |            |
|-----------|------------|-------------|------------|
| 1. normal | 2. poisson | 3. binomial | 4. uniform |
|-----------|------------|-------------|------------|

**8-Elements with common properties is called....**

- |           |         |               |                  |
|-----------|---------|---------------|------------------|
| 1. sample | 2. data | 3. population | 4. Nonparametric |
|-----------|---------|---------------|------------------|



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9- Which of the following statement is not true for an exponential distribution with parameter  $\lambda$ ?

1. mean =  $1 / \lambda$  and standard deviation =  $1 / \lambda$
2. the area under the curve is equal to one
3. the distribution is a two-parameter distribution since the mean and standard deviation are equal
4. the distribution is completely determined once the value of  $\lambda$  is known

10- Which of the following is not a characteristic of the normal distribution?

1. it is a symmetrical distribution
2. the mean is always zero
3. it is a bell-shaped distribution
4. the area under the curve equals one

11- Which of the following statements is not correct concerning the probability distribution of a continuous random variable?

1. the vertical coordinate is the probability density function
2. the range of the random variable is found on the x-axis
3. the total area represented under the curve will equal 1
4. the area under the curve between points a and b represents the probability that  $X = a$

12- When using a single die, what is the probability of rolling an odd number?

1. 0/5
2. 0/6
3. 0/1
4. 0/2

13- How consumers' intentions to buy the brand varies with different price levels is best analyzed via

1. ANOVA
2. T-TEST
3. REGRESSION
4. ANCOVA

14- A perfectly balanced coin will have a probability of a head equal to .....

1. 0/5
2. 0/6
3. 1
4. 0/2

15- If a sample space contains finite or infinite number of sample points, such a space is referred to as ..... sample space.

1. measurable
2. countable
3. acceptable
4. occur

16- When we are choosing a random sample and we do not place chosen units back into the population, we are: sample and we do not place chosen units back into the population, we are:

1. Sampling with Replacement
2. Sampling without Replacement
3. Using a Systematic Sample
4. Using a Voluntary Response Sample



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17-A \_\_\_\_\_ is an examination of all the units in a population.

1. random sampling with replacement
2. random sampling without replacement
3. statistical inference
4. census

18-A \_\_\_\_\_ variable can have values that are numbers on the real number line.

1. qualitative
2. quantitative
3. random
4. nominative

19-The probability of making a Type I error is denoted by ....

1. a
2. b
3. 1 - a
4. 1 - b

20-When the p-value is used for hypothesis testing, the null hypothesis is rejected if .....

1. p-value  $\leq$  a
2. a < p-value
3. p-value  $\geq$  a
4. p-value = a

21-In s Simple linear regression, which of the following statements indicates there is no linear relationship between the variables x and y?

1. Coefficient of determination is -1.0.
2. Coefficient of correlation is zero.
3. Sum of squares for error is 0.
4. None of these choices.

22-The best definition for "Hypothesis" is

1. An unproved theory proposition
2. A proved theory proposition
3. A unproved theory assumption
4. A proved theory assumption

23-What is the best definition for "Supposition"?

1. perposition
2. assumption
3. rejection
4. decision

24-What is the closest definition of "outlying"?

1. For out from a certain point
2. overall
3. pair
4. axis

25-What is the closest definition of "Predicted"?

1. overall
2. foretell
3. proper
4. pair

26-What is the definition of "In general"?

1. axis
2. overall
3. act
4. hypotheisi

27-What is the closest definition of "Independent"?

1. free from control
2. tow cases
3. random
4. ovreall

