Give an account on the difference between

   a) Respiration at rest and respiration of phonation (4 marks)
   b) Alpha and gamma system in the control of the motor act (4 marks)

2-a) explain the function of the cerebellum in communication (5 marks)

   b) Give an account on laryngeal sphincters and their function (5 marks)

3- physiology of swallowing in brief (10 marks)

4- a) the non-pneumatic closure of vocal folds is during swallowing   (3 marks)

- Speech
- Blowing,
- Whistling

b) the auditory sensory areas in the temporal lobes (3 marks)

- Area 41 and 42
- Area 17
- Area 22
- Area 19

5- a) all of the following are mechanical forces of vocal folds except (3 marks)

- Elasticity
- Viscosity
- Tension
- Muscle state

b) receptors that initiate swallow reflex are present mainly (3 marks)

- Anterior faucial pillars
- Posterior faucial pillars
- Base of the tongue
- Hard palate

6- a) the middle ear increases sound pressure by approximately (3 marks)

- 30db
- 60db
- 90db
- 10db

b) jitter is found in both normal and abnormal larynx it doesn't exceed.....in normal larynx (2marks)

- 0.7 Hz – 4 Hz
- 1.7Hz- 8 Hz

Good Luck

Tanta Faculty of Medicine

Dept. of Public Health & Community Medicine

End Semester Exam. In Biostatistics For 1ˢᵗ Part Master Degree in Phoniatrics

(August, 2021)   All questions should be attempted   [45 Marks]

1- Number of beds in a hospital is :

  a. Qualitative and ratio variable.

  b. Quantitative and continuous variable.

  c. Discrete and nominal variable.

  d. Non of the above.

2- A good way to get a small standard error is to use :

  a. Repeated sampling

  b. Small sample

  c. Large sample

  d. Large population

3- The most frequently occurring value of a data set is called the :

  a. Variance.

  b. Median.

  c. Mean.

  d. None of the above.

4- Probability sampling includes the following techniques, except :

  a. Simple random sampling

  b. Cluster sampling

  c. Purposive sampling

  d. Stratified random sampling

5- A set of all units of interest in a study is called :

  a. Sample

  b. Population

  c. Parameter

  d. Statistic

6- The power of the test is equal to :

  a. β

  b. α

  c. $1 - \beta$

  d. $1 - \alpha$

7- In skewed data, the most useful measure of dispersion is :

  a. Range

  b. Interquartile range

  c. Standard deviation

  d. Non of the above

8- Which of the following measures is sensitive to extreme values?

  a. Mean.

  b. Range.

  c. Standard deviation.

  d. All of the above.

9- Which of the following is a qualitative ordinal variable?

  a. Marital status.

  b. Grade of meat.

  c. Blood urea (mg%).

  d. Non of the above.

10- Interquartile range is :

  a. Sensitive to extreme values.

  b. A measure of dispersion.

  c. The 50th percentile.

  d. The difference between the smallest and largest value in a data set.

11- In statistical estimation, more precise estimate is obtained when :

  a. The sample size is small.

  b. The standard error is high.

  c. The data are less variable.

  d. Non of the above.

12- The degree of confidence is equal to :

  a. β

  b. α

  c. $1 - \beta$

  d. $1 - \alpha$

13- Which of the following is a measure of frequency :

a. Mean
b. Median
c. Rate
d. Mode

14- Four people have an average age of 15 years. A 5th person joins the group that is 20 years of age. What is the average of the new group including the 5th person.

a. 18
b. 17
c. 16
d. 14

15- A subset of the population selected to carry out a study is called a :

a- Variable.
b- Data.
c- Parameter.
d- Sample.

16- If a data set is arranged and has an even number of observations, the median :

a. Can not be determined.
b. Is equal to the mean of all values.
c. Is the average of the two middle values.
d. Non of the above.

17- A numerical value of characteristic of a population is called :

a- Parameter.
b- Statistic.
c- Variable.
d- Matrix.

18- The hypothesis that a researcher is trying to prove is called the :

a. Alternative hypothesis
b. Elective hypothesis
c. Optional hypothesis
d. Null hypothesis

19- The variable stage of laryngeal cancer is :

a. Nominal.
b. Ratio.
c. Qualitative.
d. Non of the above.

20- Suppose a distribution is skewed with a median of $75.00 and a mode of $80.00. Which of the following is a possible value for the mean of distribution?

a. $82
b. $72
c. $92
d. None of the above.

21- Rejection of a true null hypothesis is called :

a. Standard error
b. Replication error
c. Type I error
d. Type II error

22- A statistical test used to compare 2 or more group means is known as :

a. Independent sample t-test
b. One-way analysis of variance
c. Chi-square test
d. Mann-Whitney test

23- Failure to reject a false null hypothesis is called :

a. Type I error
b. Type II error
c. Standard error
e. Replication error

24- One of the graphical presentation for qualitative data is :

a- Bar chart.
b- Histogram.
c- Frequency polygon.
d- Stem and leaf plot.

25- α / 2 is called :

a. One tailed significance level
b. Two tailed significance level
c. Left tailed significance level
d. Right tailed significance level

26- A contingency table (2 x 2) is used to calculate :

a. t-test
b. Correlation coefficient
c. Variance
d. Chi-square statistic

27- The mean of a distribution is 28, the median is 25, and the mode is 23.5. It is most likely that this distribution is :

a- Positively Skewed
b- Symmetrical
c- Negatively skewed
d- Normal

28- Which of the following measures is not sensitive to extreme values?

a- Mean.
b- Range.
c- Mode.
d- All of the above.

29- The median is a better measure of central tendency than the mean if :

a. The distribution is skewed
b. The variable is discrete
c. The variable is continuous
d. The distribution is symmetric

30- Given IQ scores are approximately normally distributed with a mean of 100 and standard deviation of 15, the proportion of people with IQs above 130 is :

a. 2.5%
b. 5%
c. 95%
d. 68%

Good Luck