MAKEUP ASSIGNMENT #1  
Principles of Biostatistics, SPRING 2022  
Monroe College

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**Q1. A researcher examined the effects of race/ethnicity on diabetes prevalence among residents of a community in New York. The null hypothesis stated that there was no association between gender and diabetes prevalence. The results of the study were as follows:**

Diabetes Prevalence p-value

Race/Ethnicity 0.05

Male 8.234%

Female 8.134%

**Is the difference statistically significant?**

A. Yes

B. No

C. None of the above choices.

**Q2. Which of the following statements is correct about bias?**  
A. Bias is the tendency to overestimate the true value of a variable  
B. Bias is the tendency to overestimate or underestimate the true value of a variable  
C. None of the above choices

**Q3. A stratified random sample draws:**  
A. Independent simple random samples from within relatively heterogeneous groups  
B. Independent simple random sample from within a sample frame  
C. Independent simple random samples from within relatively homogeneous groups  
D. Independent random sample from within relatively large units consisting of smaller sub-units

**Q4. In non-experimental studies, the investigator simply classifies individuals as:**  
A. Exposed or non-exposed without intervention  
B. Exposed or non-exposed with intervention  
C. Exposed or non-exposed with minimal intervention  
D. None of the above choices

**Q5. If the mean is smaller than the median, the distribution is:**   
A. Negatively skewed  
B. Neutrally skewed  
C. No serious effect on the distribution  
D. None of the above choices

**Q6. A distribution’s shape can be discussed in terms of its symmetry, modality and kurtosis.**  
A. True   
B. False  
C. None of the above choices

**Q7. “The sampling distribution of means tends toward Normality even when the underlying populations is not Normal.” This is known as square root law.**  
A. True  
B. False

**Q8. What type of measurement assigns a numerical value that permits for meaningful mathematical operations for each observation?**

A. Categorical   
B. Ordinal  
C. None of the above choices

**Q9. Select the best response: This is a mathematical function that assigns probabilities for discrete random variables.**

A. Sample space

B. Probability mass function (pmf)

C. Probability density function (pdf)

D An event

**Q10. The standard deviation is sensitive to outliers and skews.**A. True  
B. False  
C. None of the above choices