

**Quiz (20% of grade; 40 points) – you have 60 minutes to complete this quiz.**

- A. **Calculations (28 points).** Use **pencil only**, and do all of the questions below. Use the exam paper as your answer sheet and show all appropriate work. Use the following data set for all of the calculations, and circle your answers for the calculations unless instructed otherwise.

A sample of nine (9) faculty members used the Internet for professional purposes for the following number of years:

19, 19, 20, 12, 6, 3, 5, 6, 22.

1. What was the unit of analysis in this study? (2 points)
  
2. What was the variable of interest? (2 points)
  
3. Generate the frequency distribution for this data set using class examples as models; do not circle the frequency distribution. (5 points)
  
  
  
  
  
  
  
  
  
  
4. Calculate:  
the mean (2 points)  
  
the median (2 points)

5. What is the standard deviation of this data set? (5 points)

6. Generate a stem-and-leaf plot for the observations; do not circle the plot. Be sure to identify the leaves and stems as appropriate. (4 points)

7. Generate the six-figure summary; do not circle the summary. (6 points)

B. **Concepts (12 points).** Use **pen only**, and answer all of the questions below. Use the exam paper as your answer sheet, using the space provided as an indication of how long an answer should be.

1. In the error model of research, what is the relationship between reliability and noise? (4 points)

2. Identify one element of triangulation and explain how it improves a research study. (4 points)

3. What does it mean to operationalize variables? (4 points)

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**Do not write below this line.**