Part I: (5 points each)

1. Give an example of a research design with good internal validity but bad external validity. Explain why the internal validity is good, why the external validity isn’t good, and why external validity is an important consideration in research.

2. What type of measurement scale – nominal, ordinal, or interval/ratio – does each describe?
   a. counties in a state (Kenton, Campbell, Boone, etc.)
   b. income ($0 – $10,000; $10,001 - $20,000; $20,001 - $30,000; etc.)
   c. gender
   d. age
   e. satisfaction with city services, measured on a scale from 0 (completely dissatisfied) to 5 (completely satisfied)

3. Explain the terms confidence level (CL) and confidence interval (CI). In your answer, be sure to discuss accepted standards (what’s considered an acceptable or standard CL / CI) and also the relationship between CL, CI, population size and sample size.

4. Give me an example of a nominal level variable, an ordinal level variable, and an interval level variable (in that order). Which level gives us the most information?

5. What’s the difference between an open-ended question and a closed-ended question? For each type of question, list one advantage and one disadvantage. Also, write one question for each type (open-ended and closed-ended).

6. Explain what the three most important things are you need to know to determine how legitimate the following survey results from Foxnews.com are, and why knowing these things matters.

   59% of Americans say they would oppose their state passing a law like the one in South Dakota that bans abortion in all cases except to save the mother’s life. 35% say they would support a similar law.
7. Tell me what a pretest is, why pretesting a survey is a good idea, and what the differences are between a real or true pretest and a pseudo-pretest.

8. If you knew the populations of countries, what level(s) of measurement (mode, median, and mean) could you use and why?

9. In a September, 2005 *New York Times* article, the author states: *The median household income of Americans has been stuck at around $44,000 for five years now.* What does this figure actually tell you? Why might having the data stated only in terms of median be of concern?

**Part II: (30 points)**

Alex is doing a survey. She wants to know what NKU students’ feelings are about the availability of campus housing. Your job is to 1) identify what is problematic with the survey questions; 2) revise the questions to correct any problems identified in step #1; 3) create two more questions you think would be useful for the survey. Assuming she desires a confidence level of 95% and a confidence interval of +/-3%, how big would her sample need to be? What method would be appropriate to choose the students to survey for her sample?

1. What is your gender? Male ___ Female ___

2. Do you live on campus or at home? On campus____ At home ____

3. How do you feel about the shortage of housing on campus?

   [Box for text input]

4. The university should (circle all that apply):

   1: increase the amount of available housing
   2: provide more funding for on-campus housing
   3: provide campus apartments

5. How many times have you applied for campus housing?
   1-2 times_____ 3-4 times _____ +5 times ______