**ADEQUATE PENETRATION**

**Laboratory Experiment #2**

**Procedure:**

Make a series of four exposures of the pelvis phantom using 10 x 12 inch 400-speed cassettes in the Bucky mechanism. Number your exposures with lead markers, and use the techniques listed below:

Exposure #1: 10-12 mAs, 80 kVp

Exposure #2: 25 mAs, 40 kVp

Exposure #3: 50 mAs, 40 kVp

Exposure #4: 100 mAs, 40 kVp

Alternate Techniques:

Exposure #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Exposure #2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Exposure #3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Exposure #4: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Analysis:**

1. On Exposure #1, has a satisfactory density been achieved?
2. Have satisfactory densities been achieved on Exposures #2, #3, or #4 with their increasing mAs values?
3. Do yo7u believe that a satisfactory density level on the film would be achieved if you increased your mAs to 500?
4. Can increasing intensity compensate for poor penetration?
5. Reword the principle of radiographic technique in Question #4, in terms of *kVp* and *mAs*, that this experiment demonstrates.