**Vegetation Measurement & Assessment (REM 357 & REM 410)**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CONTENT Summary** Assignment **- Module 5 – Density** (25 points total)

Due Tuesday, **September 25, 2012** by midnight through the University Blackboard System ([www.blackboard.uidaho.edu/](http://www.blackboard.uidaho.edu/))

1. When using quadrats or plots to estimate plant density, what must you consider to select the right size and shape of plot? (10 pts):
2. What is the difference between quadrat based and plotless methods? Describe a situation where a quadrat based techniques would be better than a plotless technique and why. (7 pts)
3. Density of plants is easier to measure for some types of plants than others. For the following types of plant communities describe whether density would be easy or difficult to measure and why. Also, suggest an appropriate plot shape and size for the assessment of density in each of these vegetation types. (2 pts each – 8 pts total).
   * Sod-forming (i.e., rhizomatous) grass communities like reed canary grass (Phalaris arundinacea) along a stream in the Pacific Northwest?
   * Widely spaced shrubs such as creosote bush *(Larrea tridentata)* on a Chihuahua desert site?
   * Clonal trees such as quacking aspen (*Populus tremuloides)* in the Rocky Mountains?
   * Annual grasses, such as cheatgrass (*Bromus tectorum)* in the Great Basin?