

**Study Objectives for BIOLOGY OF AGING:
EXAM # 2**

The student should be able to (From Chapters 3 & 4)

1. Discuss the major characteristics of the 4 tissue types: Epithelial, muscle, nerve, and connective. In your answer you should make sure that you know the different cell types that make up each of these tissues (i.e. squamous, columnar, cuboidal, smooth, skeletal, cardiac s-a node, purkinje fibers, left vs right heart, sensory, motor, cns, fibroblast, bone, blood, ligaments, tendons), their general functions and general characteristics.
2. Describe the 5 major senses and the major parts of each: taste (four tastes), smell, hearing (where are the nerve receptors for hearing), touch (types of receptors, i.e. heat, cold, pressure, pain), sight (rods and cones on retina).
3. Discuss the 3 parts of a nerve cell and what a synapse is. What is a nerve impulse, how is it made (depolarization, Na^{++} and K^{+}), and how does it get across the synapse? What is the myelin sheath?
4. Know what the hormones do and from which gland they come from in Table 4.1 on page 77.
5. Be able to describe how each of the above change with age (generally, not in any great specifics since that will come later).