ARTICULATIONS X-RAYS – QUESTIONS

**J-1**
A. ID joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.

**J-2**
A. ID joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.
B. ID joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.

**J-3**
A. ID and give two names for this joint’s structural class.
B. ID and give two names for this joint’s structural class.

**J-4**
A. ID joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.
B. ID joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.

**J-5**
For each joint, ID the joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.

A. E.

**J-6**
A. ID and give two names for this joint’s structural class.
B. ID joint, give two names for its structural class, then state its subcategory. Also state how many axes of motion.

**J-7**
Compare this arthritic knee (from an 80-year old man) to the healthy knee of J-1. **NOTE** (1) the reduced space between bones due to erosion of articular cartilage, and (2) the roughness of the bone itself, particularly the bone spur at the arrow.

**J-8 N & J-8 A**
A lateral comparison of a normal (N) knee and an arthritic (A) knee. **NOTE** the thinner bone density in A (as indicated by the width of the “white” lines) compared to N. Note also the irregular curvatures of the articular surfaces in A, particularly the patella.

**J-9 A, B & C**
Anterior & lateral views of a total knee replacement, a form of **arthroplasty**. In the lateral view (9B), note also the small **fabella**, a sesamoid bone in the lateral tendon of the gastrocnemius. 10-20% of the population have fabellae.
ARTICULATIONS X-RAYS – ANSWERS

J-1
A. Knee (tibiofemoral): synovial (diarthrosis) hinge; monaxial

J-2
A. Proximal radioulnar: synovial (diarthrosis), pivot; monaxial
B. Elbow (humeroulnar): synovial (diarthrosis), hinge; monaxial

J-3
A. Intervertebral disk: cartilaginous (amphiarthrosis)
B. Tooth in socket: fibrous (synarthrosis)

J-4
A. Ankle: synovial (diarthrosis), hinge; monaxial
B. Intertarsal: synovial (diarthrosis), planar; nonaxial (some intertarsal joints are variably classified)

J-5
A. Wrist (radiocarpal): synovial (diarthrosis), condylar; biaxial
B. Interphalangeal: synovial (diarthrosis), hinge; monaxial
C. Metacarpoophalangeal: synovial (diarthrosis), condylar; biaxial
D. Intercarpal: synovial (diarthrosis), planar; nonaxial
E. 1st carpometacarpal: synovial (diarthrosis), saddle; biaxial

J-6
A. pubic symphysis: cartilaginous (amphiarthrosis)
B. hip (coxal): synovial (diarthrosis), ball-and-socket; triaxial (multiaxial)