

## Study Guide for Second Lab Practical Exam

There will be approximately 17 questions, each associated with a separate set of specimens, on the final lab practical. Students will be given 5 minutes to answer each.

**Review** the material presented in Labs 9, 10, & 11 on Primate Cranial/Dental/Skeletal Anatomy and Paleoanthropology and Chapters 5, 6, 10, and 11 in your lab text. Students should also review the basic osteology and labs (Labs 7 & 8) on teeth and bones and consult the sections of the Jurmain et al. textbook previously assigned in preparation for completing Labs 9-11.

**Questions on the Lab Practical** will cover the following:

- Primate teeth: be able to identify and/or determine the following: dental formula, bilophodont condition, dental comb, sectorial condition in lower premolar teeth, diastema, molar cusp pattern, size and shapes of teeth, shape of the dental arcade, etc., in human and non-human primate dentitions.
- Primate skulls: be able to identify features such as sagittal and nuchal crests, brow ridges or supraorbital development, prognathic faces, post-orbital closure, post-orbital constriction, location of foramen magnum, simian shelf, etc.?
- Locomotion: be able to differentiate between quadruped, vertical clinger leaper, brachiator and biped from the skeleton. Know what anatomical features to look for and how they help differentiate between the major kinds of primates.
- Pelvis: **Review** all the features that distinguish a biped from a quadruped: shape of the ilium, greater sciatic notch depth, ischial morphology, muscle attachments, etc.
- Review the general, as well as more specific, differences in skeleton of prosimian, New World monkey, Old World monkey, ape, and human.
- Review Lab # 11 on fossil hominids. Be prepared to make observations on such cranial features as: bowridge development, facial prognathism, postorbital constriction, sagittal crests, nuchal cresting, chin development, cranial vault height etc. in fossil casts. Further, be able to make dental observations (e.g., overall size of teeth, the relative size of front and back teeth, jaw size, tooth morphology). Review the pelvic and skeletal features associated with bipedalism.
- At least one question on the exam will ask for the identification of the names of bones/teeth from casts of primate/humans fossils.
- Taxonomically classify an unknown fossil based on morphological observations.