

Study Guide for ANTH 153 Exam Two

The test format is written paragraph/short essay answers. The instructions that will appear on the test are at the end of the guide.

All exam questions will be drawn from the lecture material and class discussion with reference to the required readings.

To prepare for the test make sure that you understand, or even better, that you can provide a written answer to the following issues/statements:

1. Define the terms “novelty” and “mismatch” with reference to differences between contemporary and ancestral diets (paleolithic nutrition). Describe two aspects of ancestral diet that are markedly different to contemporary “modern” diets. Discuss how these temporal dietary differences affect current health problems.
2. Human antibodies are highly variable. Briefly describe two types of human antibodies, and discuss the evolutionary processes leading to genetic variability in the human immune response.
3. Infectious diseases have been a significant selection pressure on human populations. Briefly discuss the issue of the evolution of virulence in bacterial and/or viral organisms as they relate to epidemiological and demographic transitions in human history and prehistory. What does Ewald identify as being the key factors influencing the evolution of virulence in bacterial and/or viral organisms?
4. *Homo sapiens* are locked in an evolutionary "arms race" with parasitic organisms. Using human helminth [worm] parasites as examples, briefly describe host-parasite co-evolution and the "Red Queen" principle.
5. Discuss the possible evolutionary functions of infant crying. What are the advantages of short bouts of crying vs. long bouts of crying? How might an evolutionary perspective of infant crying inform current [Anglo-American] child-rearing practice?
6. Evolutionary and cross-cultural perspectives argue that solitary infant sleeping is a modern “Western” phenomenon. Briefly describe the arguments presented by McKenna and colleagues linking mother-infant co-sleeping to SIDS prevention. Briefly discuss problems with the McKenna argument, and/or alternate explanations for links between sleeping practices and SIDS (or infant mortality in general).
7. What, if at all, does Clay Aiken have to do with the evolution of puberty and menses?
8. Briefly discuss the evolutionary significance of secular trends in (decreasing) age of menarche.
9. According to Boyd Eaton et al. what is the significance of an evolutionary mismatch in time between menarche and first birth, and an evolutionary mismatch in the number of lifetime

ovulations (menses) experienced by contemporary women?

10. *Homo sapiens* is the only species with a post-reproductive life stage (i.e. menopause). Briefly discuss two theories about the evolution of longevity and/or the functions of the post-reproductive life stage.

EXAM INSTRUCTIONS

This is a written exam composed of paragraph/short essay questions.

You have a choice among ___ questions. Answer four (4) questions only. Each question is worth 5 marks (20% of your total grade).

Write **AT LEAST** half a page (and no more than one page).

1. DO NOT USE PADDING SENTENCES like “I really liked this article” - just give me the facts as you see them.
2. DO NOT USE LISTS OR BULLET POINTS.
3. You can and should use blank paper (or unused sections of the test sheets) to prepare your answers. Cross out any writing on the test sheets that you don't want marked.
4. Write legibly - illegible writing will not be marked.
5. Ignoring these instructions will result in the deduction of marks.

You have until the end of the class period to complete the exam - GOOD LUCK!