

Study Guide for ANTH 153 Exam Three

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. Briefly describe the non-evolutionary neurobiological reward principle as it relates to human drug use (i.e. Everitt and Robbins 2005). Briefly describe the evolutionary interpretation of the reward principle forwarded by Nesse and Berridge (1997). Briefly discuss how Nesse and Berridge have redefined the reward principle as an evolutionary mechanism shaped by natural selection.
2. Sullivan et al. (2008) argue that ancestral humans were always exposed to drugs (plant toxins). Briefly describe the principle of antagonistic co-evolution between plants and herbivores. Briefly describe how the antagonist relationship between plants and herbivores is evident in human variation in liver enzymes (cytochrome P450). How does the view of Sullivan et al. (2008) contradict the classic evolutionary model of human drug use forwarded by Nesse and Berridge (1997)?
3. Briefly describe how plant toxins are also “drugs” and/or “foods” such as spices. Briefly describe how plant toxins are the product of antagonistic co-evolution between plants and herbivores. Briefly discuss how Billings and Sherman (1998) have built an argument based on these principles indicating that humans have exploited “spices” as an adaptation to increase the safety of foods.
4. Using at least two examples of commonly-used plant drugs, discuss how drugs were used by people in pre-history. Briefly describe some of the physiological effects of your chosen drugs, and discuss how these effects may have been beneficial and/or harmful to people in the past.
5. Autism is a behavioral disorder that is diagnosed from symptoms. Briefly describe some of the most important symptoms. Briefly describe how your chosen symptoms impair the ability of people with autism to experience life when compared to people without autism. Briefly describe and discuss Simon Baron-Cohen’s argument that autism is an evolved disorder produced by natural selection - do you think it is a good/bad argument, and why?
6. Social withdrawal and problems in social functioning are an important experiential aspect of serious mental and behavioral disorders. An important evolutionary theory about social cognition is called Theory of Mind. ToM has been a useful tool for understanding illnesses like autism and schizophrenia. Define ToM, describe how it is related to evolution, and discuss how it can help us understand social deficits in autism and/or schizophrenia.

7. From an evolutionary perspective, depression can be interpreted as a defect or a defense (adaptation). Provide definitions of defect and defense in the context of depression. Describe and discuss two of the hypotheses of depression as a defense in the Nesse (2000) reading.

8. A widely held view in both popular and academic discourse is that there are special roles for people with schizophrenia in what are variously described as “developing”, “traditional” or “small-scale societies”. Discuss critically with reference to “labeling theory” and the “shaman concept”. How are these issues also implicitly evolutionary arguments?

9. Allen (1997) argues that “traditional” or “small-scale societies” are not necessarily more benign for people with schizophrenia, when compared to urban industrialized settings. Describe and discuss aspects of small scale societies that might be considered stressful for people with schizophrenia. Why is this argument relevant from an evolutionary perspective?

10. Lewis (2007) argues that the future of Evolutionary Medicine lies in the direction of basic research rather than in applied clinical practice. Briefly elaborate and discuss.

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!