



ENVIR 202 • WINTER QUARTER 2003

# INTRODUCTION TO ENVIRONMENTAL STUDIES: POPULATION & HEALTH

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## Midterm Examination Review Sheet

The mid-term examination will consist of two parts. The first part is a set of short answer questions similar to (but not necessarily exactly like) the ones below. Note that this is not an exhaustive list of questions, and some may appear unfamiliar because they will be covered this week in lecture. Your short answers should not exceed one paragraph, and may be shorter.

The second part will consist of one or more essay questions. These questions ask you to make an argument and support it with evidence. Your answers will be judged both on content and organization. It would be wise to outline and write drafts of your answers beforehand. Your answers will likely be around 3-4 paragraphs.

Q01: McMichael argues that there is a mismatch between our “Pleistocene-attuned” biology and our current way of life. Name a current health problem that stems from this mismatch, and briefly explain how the mismatch produces the health problem.

Q02: Briefly describe how the social organization of production and consumption for one of the following commodities affects population health: energy, food, land, or healthcare.

Q03: McMichael states that climate effects occur on two time scales: long term and shorter term. Describe the consequences of each and give an example of each.

Q04: What is James Lovelock's Gaia hypothesis and what is its perspective on human-related environmental problems?

Q05: Diseases have ravaged human populations since the dawn of time. Diseases require a route of exposure or vector to infect the host. Describe how the management of a public trust resource can influence the spread of disease. In your answer identify the public trust resource and indicate the exposure pathway or vector important in disease transmission.

Q06: Describe a disease in terms of its infectivity, pathogenicity, and virulence.

Q07: What is the difference between common law and statutory law? Why is common law important to environmental regulation?

Q08: What statutes are implicated in your case?

Q09: Thinking in terms of environmental and public health, why should we be concerned about the geographic origins of agricultural crops in the 21<sup>st</sup> century? Cite an example.

Q10: 90% of *homo sapiens* ' existence has been as hunter gathers. Describe some of the consequences on population health as societies shifted to agriculture.

Q11: What is the agrarian ideal? Is the agrarian ideal alive and well in the Imperial Valley according to Don Mitchell?

Q12: What are three ways to intensify agriculture and what are the implications of one of them?

Q13: Marx and Smith wrote histories of human political economies that similarly identified pre-agricultural, agricultural, feudal, and industrial eras. Their explanation for the transition, however, was dramatically different. Contrast Marx and Smith's explanations for social change. What might Marx and Smith say about the concept of the Public Trust?

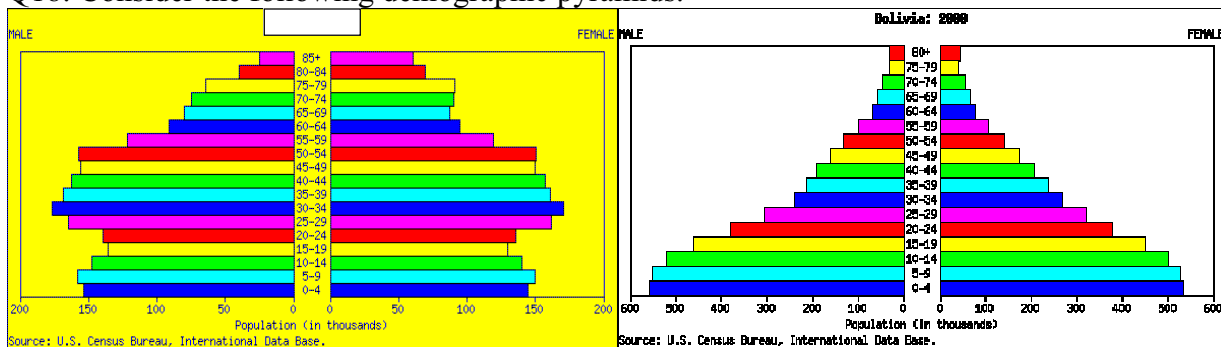
Q14: What is the difference between a risk and a hazard? Provide an example of each.

Q15: Critique McMichaels' approach to population and health. Referring to lectures, other readings, or internal contradictions in the book, what does he leave out?

Q16: Describe the some of the consequences that the “Agricultural Revolution” had on the evolution of disease in human populations. Provide at least one example

Q17: An environmental think-tank has devised a policy that would limit personal automobile use in cities to 2000 miles per year. Argue for or against the policy based on the “risks” presented by automobile use. Include at least three “objective” risk factors and three “subjective” risk factors (perceptions of risk) in your answer.

Q18: Consider the following demographic pyramids.



- Where in the demographic transition model would you place them?
- What is the population trend likely to be in these countries?

Q19: The key theme from the Lia and production and consumption lectures is that your theory tells you what questions are important to ask. Consider the following image and contrast the questions that follow based on two theoretical approaches from lectures and readings. (The Gaia hypothesis, political-economic theories, and cultural anthropology are some possibilities.)



Q20: What are three dimensions of risk that are not easily accommodated by the standard risk assessment framework?