

ENVR230 Fall 2008
Third in-class exam
Nov 20th, 2008

Answer five out of seven questions (ie about 15 minutes each).

Question 1: Industrial Agriculture vs FLO Food (Laura and Casey do not answer this question)

- a. What was the Green Revolution, and what were the pros and cons associated with it?
- b. What is the Haber-Bosch process? who discovered it, when? how does it fit in with the green revolution?
- c. What's the USDA definition of organic? (summary) Why is this important for the organic industry today, and what implications does it have for the original "organic" definition?

Question 2: Environmental Justice (Liz and Aisha do not answer this one)

- a. What is environmental justice?
- b. How does it differ from environmental racism?
- c. Who is ultimately responsible to prevent the underprivileged from being exposed?

Question 3: Environmental Contribution to Asthma (Emily and Jahan do not answer this one)

- a. What do you think is the primary cause of asthma (support your answer with your facts and reasoning ?
- b. If there is an environmental component to asthma, what kinds of public health implications are there? What types of public health measures need to be created/ enforced to reduce the burden of asthma and other chronic diseases?
- c. Why does correlation not equal causation? Why do people so often make the mistake of equating the two? How does this fact make it difficult to prove that environmental factors can cause the development of asthma?
- d. Do you agree or disagree with the hygiene hypothesis? Why ? (support your answer)

Question 4: Sustainable Agriculture (Joe does not answer this question)

- a. Explain the process by which high yield varieties of rice were produced during the green revolution and how these varieties affected local populations.

b. What environmental and public health effects were created by the construction of the Aswan High Dam?

Question 5: Sustainable Agriculture (Patty does not answer this question)

a. What are the 3 pillars that determine sustainability?

b. What are some of the major goals for sustainability (i.e. social purpose, use of technology)

c. Who is/was Ester Boserup? Who is/was Thomas Malthus? What was/were their major contributions to the debate over Sustainable Agriculture.

d. What is the IPAT formula, and what contribution does it make to the debate over Sustainable Agriculture ?

e. Compare and contrast Intensification vs Extensification. What role does each of these concepts play in the debate over Sustainable Agriculture ?

Question 6: Drinking water Quality (Carrie does not answer this one)

a. What is the definition of safe drinking water?

b. What are the major processes through which wastewater is treated?

c. What are the major problems with drinking water quality today? What is being done/should be done to remedy these problems?

Question 7: Drinking Water Quality (Kennedy does not answer this one)

a. What risks to public health does the privatization of water utilities tend to increase, and how to they increase these risk?

b. What are the motivating factors for privatization of water utilities, and once privatized what determines the company's actions with the water utilities?