**Final Exam General Review – Environmental Science 2017**

**Chapter 9- Human Populations**

1. At what time in the United States did the fertility rate reach it’s peak? Late 50s-early 60’s
2. Define demographer. someone who studies trends in human populations
3. How do you calculate population change in a particular year? births and immigrations-death + emigration (those moving in-those moving out)
4. What does the age structure look like for a country that has a high growth rate? Like A in #10
5. What are factors often associated with high infant mortality rate? those associated with a Least Developed Country like poor quality or lack of food, lack of medicine, poor hygiene
6. The fastest-growing populations are in which type of countries? Least developed countries
7. How is a population pyramid created? male and female population totals grouped by age group
8. What is a human demographic trend? Give some examples of past human demographic trends. Events that happen either economically or by health or global disaster that influences populations. Examples-The great depression, the black plague
9. What is an age structure diagram? see #10
10. What is happening in each of the following age structure diagrams? A-fast growing, B slow growing, C no growth

**A.** **B.** **C.**

  

**Chapter 15 – Food and Agriculture**

1. Define arable land land used for farming (fertile land)
2. Define famine. widespread starvation usually from drought
3. How does malnutrition occur? poor quality of food or not enough nutrition.
4. What is biological pest control? organisms used to control pests like ladybugs eating aphids
5. What does it mean for an animal to be domesticated? used for human use, not grown in the wild-like dogs and cows
6. List several reasons why erosion might occur. salinization, drought, over irrigation,
7. In the food pyramid, how much energy is lost between trophic levels? 90% lost , 10% kept What level of the food pyramid would require the least amount of energy to survive? plants use the sun
8. What is livestock and what does it provide to the consumer? food, leather, upholstery, clothing
9. What is salinization as it refers to farming and agriculture? overuse of inorganic fertilizers
10. What is the term for organisms that are bred and managed for human use? domesticated

**Chapter 17 – Non-Renewable Resources**

1. How does nuclear fission work? radioactive elements like Uranium are split apart through fission and release enormous amounts of energy used for electricity
2. What are fossil fuels and how are they made? Organic sediments from prehistoric times are compressed and heated creating fuel. (coal, oil and natural gas)
3. What are some common pollutants given off by burning coal? carbon dioxide, Nox and Sox
4. What the most commonly used fossil fuel in the world? coal
5. What is the industrial revolution and how was coal impacted during this time? during the late 1800’s great growth in industry. Coal was used for fuel
6. What is Chernobyl and what happened there? Nuclear power plant in eastern Ukraine had a major meltdown in 1986
7. What is an electric generator? mechanical energy converted to electrical energy
8. What is a moderator in a nuclear reactor?used to slow the free neutrons What is the most common moderator used for this purpose?water
9. What was nuclear power first used for? electricity
10. Where does the majority of energy used in the United States come from? coal

**Chapter 19 – Waste**

1. How are landfills built to ensure they are safe? they are deep underground encased with thick plastic liners and concrete and sand
2. How much energy can be saved by making aluminum cans from recycled aluminum?10%
3. What is compost? biodegradable waste used as fertilizer
4. What is a biodegradable plastic? breaks down over time usually from sunlight
5. Name some things that are considered hazardous waste? heavy metals, lead, gasoline, plastics, medical supplies
6. Name several problems associated with landfills. the leak “leachate” which is highly toxic
7. List examples of products that are biodegradable. paper, food and lawn wastes Non-biodegradable? glass, plastic, metal
8. What is methane gas used for? natural gas
9. What items make up the largest percentage of waste produced by households and businesses? paper
10. What makes a material biodegradable? its ability to break down naturally over time

**Chapter 20 – Human Health and the Environment**

1. After the medical revolution, what happened to the human population? exponential growth
2. What does the term “zoonosis” mean? getting a disease from animals like the black plague, or bird flu or H1N1 flu
3. Define emerging virus. One that is just happening or recurring after being gone for a long time. What are examples of an emerging virus?AIDS, Zika
4. Name examples of fungal disease causing agents. athlete's foot, warts
5. List steps required to solve environmental problems. identify the problem, discuss solutions, environmental and human impacts. Levels 1-4
6. How do organisms become resistant to bacteria?overuse of antibiotics, using antibiotics for viruses, animals given antibiotics
7. Define the term “Health”. The physical, mental and physiological well being of humans
8. Name examples of protozoan disease causing agents. malaria, cryptosporidium
9. What are some bacterial disease causing agents? Strep,
10. What is risk assessment and how is it used? what is the overall risk to human health, example air pollution