

AP Human Geography
Unit II. Population and Migration

Free Response Questions

FRQ 1 Population growth rates vary around the world. Given this fact, answer the following:

- A) Explain the difference between Crude Birth Rate (CBR), Total Fertility Rate (TFR), and Natural Increase Rate (NIR).
- B) Explain why population growth rates vary between countries with different levels of development.
- C) Name one developing country that has a population growth rate comparable to the industrialized world's rates and explain how that country has accomplished this.

FRQ 1 Scoring guideline/rubric - 12 points.

- A) 4 points - 1 point each for the proper definition and 1 point for explaining how they differ.
- B) 4 points - 2 points for explaining why Least Developed Countries' (LDCs') rates are high, 2 points for explaining why More Developed Countries' (MDCs') rates are low.
- C) 4 points - 4 points for a thorough explanation as to why China adopted the One Child Policy and describing at least 2-3 aspects to the policy.

This question is designed to make sure that students can define basic concepts of population growth

A) Crude Birth Rate: the number of births per 1000 population in a year. Total Fertility Rate: the average number of children a woman is expected to bear in her lifetime. Natural Increase Rate: The population growth of an area as measured using births and deaths only. Calculated as the Crude Birth Rate minus the Crude Death Rate.

B) This answer should reflect that MDCs have lower population growth rates, while LDCs have higher population growth rates. Reasons can include (but are not limited to): 1. Educational level of women of women in MDCs – the more education a woman has, the fewer children she is likely to have. 2. Later marriage age for couples in MDCs – the older a couple is when they are married, the fewer children they have. 3. A cultural preference in many LDCs for women to have larger families.

C) *Examples could include: China and the One Child Policy.*

FRQ 2 The Demographic Transition Model (DTM) helps explain why population is increasing at different rates in various parts of the world.

A) Describe in detail how and why a country transitions from Stage I to Stage IV.

B) Some demographers argue for a Stage V. What characterizes Stage V, and what countries and/or regions are now in this stage? Why are they in this possible new stage?

FRQ 2 Scoring guideline/rubric - 12 points.

A) 8 points – 2 points for completely explaining the basic characteristics for each of the four stages of the demographic transition.

B) 4 points for thoroughly explaining why some More Developed Countries (MDCs) have a negative population growth rate.

This question is designed to test a student's knowledge of the Demographic Transition Model, and to determine how well they understand the reasons behind some countries having a negative growth rate. A well thought out answer will include much of the following information.

Stage I countries are traditional, pre-industrial societies. These countries have a high birth rate that is offset by an equally high death rate. These countries experience little or no natural growth.

Stage II countries are usually late pre-industrial/early industrial societies. These countries still have a high, stable birth rate, but the death rate has started to fall dramatically. The overall population starts to grow dramatically. Reasons for the decline in death rate should include factors such as access to better medicine (childhood vaccinations, antibiotics); lower infant mortality rates, better sanitation practices, and cleaner water supplies.

Stage III countries are usually industrial societies. These countries' birth rates have started to fall and their birth rates continue to drop. The overall population increase continues to grow quickly. Reasons for the decline in birth rates can include (but are not limited to): a more urban population leads to smaller families (less emphasis on large families for labor on a family farm), higher levels of educational attainment for women, and more females in the workplace. Reasons for the decline in death rates are similar to stage II countries, but the efforts to create a better quality of life have intensified and reach more of the population.

Stage IV countries are late industrial/early postindustrial countries. These

societies have a low stable birth rate and a low stable death rate. The natural increase of these areas has slowed and in some cases the area has reached zero population growth. Reasons for the leveling out of the birth rate include (but are not limited to): later marriage ages, higher levels of educational attainment for women, more females in the workplace, and greater urbanization of the population. Reasons for the leveling out of the death rate include (but are not limited to): low infant mortality rate, and an increase in the average age of the population.

FRQ 3 Government policy experts from different countries look at population growth rates from a variety of perspectives. Choose one country from each list and discuss in detail their population policies and what prompted that government to take such a stance.

A) Pro-natalist countries: Germany, France, Japan

B) Anti-natalist countries: China, India, Kenya

FRQ 3 Scoring guideline/rubric - 12 points.

A) 6 points – 3 points for explaining why the country instituted a pro-natalist population policy, and 3 points for describing in detail the policies put in place.

B) 6 points – 3 points for explaining why the country instituted anti-natalist population policies, and 3 points for describing in detail the policies put in place.

This question is intended to test students' knowledge of government efforts to manipulate birth rates inside of their borders. Pro-natalism refers to policies that encourage higher growth rates. Anti-natalism refers to policies that discourage higher growth rates.

A. Reasons why these countries have resorted to pro-natalist policies include: aging populations, declining fertility rates resulting from increased urbanization, later marriage ages, high dependency ratios, greater role of women in the workplace.

Germany: generous leave policies, subsidized day care, all day kindergarten

France: Cash payments to women, tax breaks for families, subsidized child care

Japan: making daycare more available to parents, programs to help working parents

B. Reasons why these countries have pursued anti-natalist policies include: extremely young populations, unsustainable natural increase rates, and the inability to provide education or services for young people.

China: One Child Policy

India: Government ad campaign to lower fertility

Kenya: Government ad campaign to lower fertility

FRQ 4 Today the world is experiencing record rates of migration. Discuss in detail two push and pull factors for each of the following types of migration:

- A) International migration (Eastern to Western Hemisphere or Southern to Northern Hemisphere).
- B) Interregional migration (Northeast U.S. to Southeast U.S. or Central America to Mexico).
- C) Intraregional migration (rural to urban in China or urban to suburban in the U.S.).

FRQ 4 Scoring guideline/rubric - 12 points.

- A) 4 points – 2 points each for accurately describing two push factors, and 2 points for accurately describing two pull factors for international migration.
- B) 4 points - 2 points each for accurately describing two push factors, and 2 points for accurately describing two pull factors for interregional migration.
- C) 4 points - 2 points each for accurately describing two push factors, and 2 points for accurately describing two pull factors for intraregional migration.

This question is designed to show students' knowledge about why migrants leave one area to relocate to another. The push factors (reasons why migrants leave a place) and the pull factors (reasons to relocate to a certain location) vary by location, but it is important to note that at all scales, most migrants move out of economic necessity. Also important to note is that students should understand the difference between the two. For example, lack of job opportunities in Mexico is a push factor for Mexico, not a pull factor for the USA (ample employment opportunities is the pull factor).

A. Push factors include (but are not limited to): economic problems, political problems, social problems, war, and natural disaster.

Pull factors include (but are not limited to): economic opportunity, political stability, and less rigid social systems.

B. Push factors include (but are not limited to): lack of economic opportunities, climate, social issues, and war.

Pull factors include (but are not limited to): economic opportunity, better climate, and retirement friendly policies.

C. Push factors include (but are not limited to): economic problems, loss of farms, and lack of educational opportunities.

Pull factors include (but are not limited to): economic opportunity, better educational systems, and less rigid social systems.

FRQ 5 Overpopulation continues to concern many government officials around the world.

- A) Define the following terms: Arithmetic density, physiologic density, agricultural density.
- B) Name one country that is overpopulated and use the above terms to justify your response.
- C) Name one country that is under-populated and use the above terms to justify your response.
- D) Discuss two challenges of overpopulation for a developed and a developing country. Use specific examples.

FRQ 5 Scoring guideline/rubric - 15 points.

- A) 3 points – 1 point each for the proper definition of the term.
- B) 4 points for a thorough explanation of how a country is overpopulated using the above terms.
- C) 4 points for a thorough explanation of how a country is under populated using the above terms.
- D) 4 points – 2 points for discussing two challenges of overpopulation for an More Developed Country (MDC) and 2 points for discussing two challenges of overpopulation for a Least Developed Country (LDC).

This question is designed to show students' knowledge of basic population measurements.

A. Definitions:

Arithmetic density: the total population divided by the amount of all land.

Physiologic density: the total population divided by the amount of arable land.

Agricultural density: the total rural population divided by the amount of arable land.

B. Overpopulated countries may include: China, Japan, Bangladesh, India

C. Underpopulated countries can include: Russia, Cuba, and other former eastern bloc contries.

D. Challenges will vary by country according to the countries chosen.

FRQ 6 Population pyramids are used to analyze a country's demographic characteristics and for government officials to plan for future needs.

A) For each of the basic shapes of population pyramids (expanding, declining, and stable) discuss how the following terms/concepts are revealed in the shape of the pyramid: birth rates, death rates, dependency ratio.

B) For each of the basic shapes of population pyramids (expanding, declining, and stable) give an example of a country with each shape and discuss two geographic challenges they face in the future.

C) What impact does the shape (expanding, declining, and stable) of a country's population pyramid have on migration issues? Use specific examples in your response.

FRQ 6 Scoring guideline/rubric - 21 points.

A) 6 points – 2 points each for describing the relationship between birth rates, death rates, and the dependency ratio for an expanding, declining, and stable population pyramid.

B) 9 points – 3 points each 1 point for a correct example and 2 points for explaining two geographic challenges.

C) 6 points – 2 points each 1 point for a correct example and 1 point for identifying the migration issue.

This question is designed to test students' knowledge about and their ability to analyze population pyramids.

A. Expanding population pyramids are pyramid shaped with much larger bases than tops. Declining population pyramids are mushroom shaped with a larger older generation than a younger generation. Stable population pyramids look more cylindrical with each cohort under the age of 60 being roughly equal in population.

B. Birth rates are reflected in the lower cohorts of the population pyramids. In areas with high birth rates cohorts will get bigger at the bottom of the pyramid. Areas with decreasing birth rates will have increasingly smaller cohorts at the bottom of the pyramid. Stable pyramids' cohorts will be roughly the same sizes.

C. Answers will vary depending on the examples chosen.

FRQ 7 The Industrial Revolution, demographic transition and international migration are all connected. Answer the following questions using specific examples.

A) What is the relationship between the Industrial Revolution and demographic transition? In other words, how did the Industrial Revolution contribute to explosive population growth?

B) How did the diffusion of the Industrial Revolution influence international migration streams in the 19th and early 20th centuries?

C) Give two specific examples the last thirty years of countries in different regions in Stage II of the demographic transition and how this contributed to international migration.

FRQ 7 Scoring guideline/rubric - 12 points.

4 points for thoroughly explaining how the Industrial Revolution contributed to explosive population growth.

4 points for correctly explaining the diffusion of the Industrial Revolution, and how that contributed to population growth and thus international migration streams.

4 points – 2 points for accurately describing each example from a different region.

This question is designed to show the effects of the Industrial Revolution on world population growth and international migration.

A. The Industrial Revolution (1750 – Present) led to a population increase as more modern farming practices, medical techniques, sanitation practices were developed. Examples of these changes include (but are not limited to): four-field crop rotation, use of farming machinery and use of chemical fertilizers, pesticides and herbicides to increase yield, vaccinations, antibiotics, surgical techniques, and stable clean water supplies. These practices led to a decrease in the death rate (stage II). Later, the need for fewer children as people moved to urban areas from farms, and the entrance of women into the workplace; led to the decline in birth rates (stage III). Ultimately the higher standard of living allowed the birth and death rates to stabilize at a much lower level than before (stage IV).

B. Great Britain, the United States and Germany were the first countries to industrialize. The United States, especially, saw a tremendous population growth from mostly European migrants (1800s and early 1900s), and Mexican migrants (post 1940) as a result of industrialization. The need for workers in the factories as well as other real or perceived economic opportunities in the fast growing cities served as pull factors for many rural residents as small farms were consolidated and machinery replaced many farm workers.

C. In stage II, the area experiences a major population growth. This leads many of the people to seek better opportunities elsewhere. Many move to countries where they can work in industrial jobs in stage III and stage IV countries. Examples of stage II countries where this has happened recently are Algeria, Turkey, India, Nigeria, Kenya, Mexico, El Salvador, Haiti, and Dominican Republic.

FRQ 8 Throughout U.S. history chain migration has had a profound impact on many urban and rural communities. Using examples from the past thirty years, answer the following questions.

A) Give two examples with regard to the impact chain migration has had on urban areas of the United States.

B) Give two examples with regard to the impact chain migration has had on rural areas of the United States.

FRQ 8 Scoring guideline/rubric - 12 points.

A) 6 points – 3 points for each example – 1 point for a correct example and 2 points for describing the impact on an urban area in detail.

B) 6 points – 3 points for each example – 1 point for a correct example and 2 points for describing the impact on a rural area in detail.

This question is designed to test students' knowledge regarding chain migration and its impact. Chain migration is the migration of people to a specific location because relatives or members of the same nationality previously migrated to that location.

A. Chain migration has resulted in ethnic neighborhoods, created unique built landscapes that may have buildings built in a traditional manner of the homeland (especially religious building and restaurants) and signs in different languages.

B. Chain migration has resulted in ethnic enclaves where the built landscape (housing types especially) are created to look like homeland. Examples include log cabins (Scandinavian), and adobe houses (Mexican). Traditional types of farming were often used (long lots in Louisiana/Mississippi River area), and toponyms of towns often reflect the ethnic influence (Bismarck, St. Louis, Louisville).

FRQ 9 Both Thomas Malthus and modern-day neo-Malthusians believe that the world will become overpopulated at some point in time.

A) Describe Malthus' views on population growth and food production and his conclusions on the overpopulation of the world.

B) Describe the views of the neo-Malthusian movement. In what ways do the views of Malthus and the neo-Malthusians differ?

C) Describe Julian Simon's or any neo-Malthusian critics' views on overpopulation. How do they differ from the neo-Malthusian movement?

FRQ 9 Scoring guideline/rubric - 12 points.

A) 4 points for a thorough explanation of Malthus' views on overpopulation.

B) 4 points – 2 points for accurately identifying neo-Malthusian theories and 2 points for where they differ with Malthus.

C) 4 points for identifying and explaining the arguments against overpopulation.

This question is designed to test students' knowledge on various theories of overpopulation.

A. Malthus believed that since population increase was exponential (expanding by doubling), and that agricultural yield increase is arithmetic (expanding only by 1 at a time), that soon the population would outstrip the ability of farmers to produce the necessary food to feed the population and that large scale starvation would follow.

B. Neo-Malthusian views acknowledge that Malthus' ideas about overpopulation were oversimplified and have not come to pass, however, neo-Malthusians believe that the substance of Malthus' argument is valid. Neo-Malthusians believe that population growth may not outstrip agricultural yield growth, but it will certainly outstrip the Earth's ability to provide other natural resources including metals, petroleum, natural gas, leading to social upheaval and population die-off.

C. Critics of neo-Malthusian thought (Julian Simon, Esther Boserup) contend that as natural resources dwindle, new technologies will be invented to make up for the shortfall. Boserup contended that in agriculture farmers will adopt new technologies and modern practices to increase yield. Simon believed in a similar idea saying that as certain metals/resources will not become depleted because market forces will invest in alternate technology.

FRQ 10 The nature of migrants to the United States has changed dramatically over the past 150 years.

A) Identify the two regions where most migrants to the United States originated prior to 1930. Describe at least one push factor and one pull factor for migration at this time.

B) Identify the two regions where most migrants to the United States originated after 1930. Describe at least one push factor and one pull factor for migration at this time.

C) Why has the source areas for immigrants to the United States changed over the past 150 years?

FRQ 10 Scoring guideline/rubric - 18 points.

A) 6 points – 3 points each for identifying a region and one push and pull factor contributing to migration prior to 1930.

B) 6 points - 3 points each for identifying a region and one push and pull factor contributing to migration after to 1930.

C) 6 points for a thorough discussion as to why source areas for immigrants to the United States has changed over the last 150 years.

This question is designed to test students knowledge of the historical changes in migration fields for the US.

A. Migrants prior to 1930 came from some of the following areas:

Germany (6 million migrants):

Push factors may include – political persecution, displacement of farmers

Pull factors may include – chain migration, Homestead Act

Ireland (4.5 million migrants):

Push factors may include – potato famine, religious persecution,

Pull factors may include – chain migration, job opportunities (mines, railroads)

Italy (4.2 million migrants):

Push factors may include – overcrowding, lack of economic opportunities

Pull factors may include – job opportunities, chain migration

Austria-Hungary (mostly Poles and Czechs – 3.7 million migrants):

Push factors may include – religious persecution, ethnic persecution

Pull factors may include – religious freedom, land

England (2.5 million migrants):

Push factors may include – enclosure movement, religious persecution,

Pull factors may include – chain migration, religious freedom, job opportunities

B. Migrants after 1930 came from some of the following areas:

Mexico (15+ million migrants):

Push factors may include – lack of economic opportunities

Pull factors may include – job opportunities, chain migration

China (2 million migrants)

Push factors may include – political persecution, lack of economic opportunities

Pull factors may include – political freedom, job opportunities

Philippines (1.9 million migrants)

Push factors may include – lack of economic opportunities

Pull factors may include – job opportunities, chain migration

C. Source areas for immigrants changes as various regions/countries experienced stage two of the demographic transition. The More Developed Country (MDC) experience is based upon changes in the economy where as the Least Developed Country (LDC) experience is based upon the diffusion of modern medical practices and drugs.