
AP[®] Human Geography

Sample Student Responses and Scoring Commentary Set 2

Inside:

Free-Response Question 3

- ☒ **Scoring Guidelines**
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Question 3: Two Stimuli**7 points**

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- (A) Select ONE country listed in the table and identify its stage in the demographic transition model.** **1 point**

Accept one of the following:

- A1. Any country in the table (Croatia, Estonia, Germany, Greece, Japan, Portugal, or Romania) and stage 4 or stage 5.

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- (B) Define the concept of a pronatalist policy.** **1 point**

Accept one of the following:

- B1. Pronatalist policies are those that encourage or promote population growth.
- B2. Government programs that provide incentives (e.g., longer parental leave, childcare, tax credits) for increasing fertility rates and/or population growth.
- B3. Pronatalist policies are designed to increase the birth rate and/or the fertility rate of an area.

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- (C) Explain ONE factor that affects birth rates as countries move from stage 3 to stage 4 in the demographic transition model.** **1 point**

Accept one of the following:

- C1. Increased access to health care, contraceptives, and/or other family planning information tends to reduce the number of children born.
 - C2. Increased access to education and/or employment of women is generally associated with lower fertility.
 - C3. More people live in urban areas where space is limited or the cost of living makes raising children more expensive, reducing the birth rate.
 - C4. People may have fewer children over time as agricultural production requires less labor (e.g., mechanization, agricultural chemicals).
 - C5. Decreases in infant and/or child mortality rates may reduce the need to have more children.
 - C6. Government policies and/or programs may reduce fertility (e.g., antinatalist policies).
-

(D) Describe ONE likely economic effect when countries have negative population growth. 1 point

Accept one of the following:

- D1. A country with an aging population or a high elder dependency ratio may spend more money on programs for the elderly or retired.
- D2. A low youth dependency ratio may create an opportunity for public funds to be shifted from education and/or childcare needs to social services for the elderly.
- D3. Countries may not have a large enough workforce or enough working-aged people to support the economy and/or pay taxes.
- D4. Employers may need migrants to supplement declining labor pools and/or a smaller workforce.
- D5. Primary sector activities that are labor-intensive may be limited as the economy shifts to activities that require fewer workers.
- D6. Economies may shift from labor-intensive primary and/or secondary sector activities to tertiary or higher-sector activities that can be performed by an aging workforce or outsourced to workers in other countries.
- D7. Large companies may create economies of scale and/or increase usage of technology to create more efficient production processes that use fewer workers.
- D8. Economic stagnation and/or decline may occur when there are fewer people to purchase goods, real estate, and/or services.

(E) Based on the data shown in the table, describe a policy that a government might develop in response to demographic change. 1 point

Accept one of the following:

- E1. Governments might implement pronatalist or population growth policies and/or increase immigration.
- E2. Pro-immigration policies might include expanding access to public benefits or services and/or provide assistance with assimilation.
- E3. Pronatalist policies might include increased parental leave, increased tax incentives, government-subsidized childcare, and/or family-friendly employment law.
- E4. Governments might redesign finance or tax structures (e.g., changes to social security and/or pension systems) that affect the elderly population.
- E5. Governments might expand health care options for the elderly population (e.g., retirement or nursing homes, health clinics, specialty hospitals), and/or governments might train professionals specializing in geriatric health care.
- E6. Governments might support programs to meet the social needs of senior citizens (e.g., adult day care, senior centers, senior housing).
- E7. Governments might support policies that improve infrastructure to make landscapes, signage, transportation, and/or buildings more friendly to the elderly.
- E8. Governments might try to slow or halt rural population loss by improving rural-to-urban transportation systems, encouraging remote work, and/or promoting rural economic growth (e.g., tourism, industry).

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- (F) Explain ONE reason why the life expectancy in urban areas may be higher than the life expectancy in the entire country. 1 point**

Accept one of the following:

- F1. Urban areas may have better access to food, health care, sanitation, and/or social services.
- F2. There may be greater access to education, nutritional information, and/or health information in urban areas.
- F3. Urban working conditions may include shorter daily working hours, fewer weekly hours, less physically demanding work, and/or better safety (e.g., fewer work accidents).
- F4. Urban living may lead to healthier lifestyles due to greater access to recreation facilities, sports activities, walkable cities, and/or bikeable cities.

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- (G) Using the data in the table, explain how, over time, low birth rates may impact the country's percent of population over age 65. 1 point**

Accept one of the following:

- G1. Low birth rates may lead to an increase in the percent of population over age 65 because the overall population ages and/or there are fewer children.
- G2. If birth rates drop below death rates or if the rate of natural increase is negative, the overall population will age and/or the percent of population over age 65 will increase.

Total for question 3: 7 points

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page. Do not skip lines.

A) Japan is in the 5th stage of the demographic transition model.

B) A pronatalist policy is a government policy proposed to increase the fertility rate ~~or~~ / the birth rate in a country that ~~is~~ currently has a low birth rate. An example would be lowering ~~the~~ child care cost in daycares.

C) One factor that affects the birth rates in a country moving from stage 3 to 4 is that more & more women are joining the workforce making it less likely for a woman to have many children as they are now focused more on work. More job opportunities for women open up & ~~encourage~~ encourage more women into the workforce.

D) One economic effect on a negative population growth is that there will be less & less people in the work force as time goes on. An example of this would be Japan that currently has a very high elderly-dependency population that puts a ~~straining~~ strain on the working population. Who's money is used to support retirements

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Question 1

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Begin your response to each question at the top of a new page. Do not skip lines.

~~2~~ ~~It~~ for the elder. With less workers in the work field there is less economic activity having a negative affect on the economy.

E) A government might develop a pronatalist policy for countries in stage S of the demographic transition model. This will help promote the birth rate that was starting to decrease.

● An example would be the ~~promotion~~ of the decrease in child~~care~~ expenses such as baby food and diapers.

F) The life expectancy in urban areas may be higher than the life expectancy in the entire country because of more access to healthcare systems such as hospitals and clinics. Typically in rural areas there are less ~~no~~ hospitals or most of the time none, while in urban and more populated areas there is more need and ~~use~~ use for big hospitals.

G) Low birth rates can ~~impact~~ impact the country's percentage and GS because of the birth rates of a population is how the country will get its economy. If there are less people in the workforce from the lower birth rate, there is no

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Question 1

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working population that can support it.
Retirement ~~more~~ money for the population
and GS comes from the taxes of the
working population. With less people in the
workforce the less availability of retirement
for the elder population.

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0060183



Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page. Do not skip lines.

A. Japan can be seen as a stage 5 country, from their decrease in total population, low birth rates, ~~and~~ high death rates, and percentage of old people.

B. The pronatalist policy is the act of a government giving positive incentives for having children, such as free childcare, maternity leave, payment options and paternity leave.

C. The dependency ratio of a stage 3 country can effect its movement into a stage 4, by not having enough youth to support high birth rates, and too many elderly who can't have children either.

D. Not enough people are able to support a country's job & employment necessities, causing a negative effect on the economy.

E. A pronatalist policy can come into effect, if a country's government ~~not~~ wants their birth rates to increase because of a lack in youth.

F. Urban areas often have better access to healthcare, hospitals, easier transportation, while many rural areas don't have the accomodies. This makes the rural areas have lower life expectancies than the urban areas, bringing down the whole country's life expectancies compared to specific regions within.

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0056216



- **Important:** Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page. Do not skip lines.

G. ~~A big~~ The best example is the country's dependency ratio, the amount of people able to obtain a job compared to the services needed for the amount of elderly people. Low birth rates can cause the percentage of the population over 65 ^{to decrease} from the lack of people able to help, ~~and care~~ care and tend to them. Without an increase in youth, total population will decrease and the amount of elderly people will become insignificant.

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0056216



Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page. Do not skip lines.

3. A. Romania would be near stages one and two of the Demographic transition model.

B. A pronatalist policy would be when a group of people agree with an argument.

C. The ~~too~~ CBR decreases in stages 3 and 4 because women are out getting jobs and becoming successful. This would make them want to delay marriages and having kids.

D. One economic effect that can lead to negative population growth is when health care isn't good. So many people that are near the older ages don't live long, while those in the middle ages don't want to give birth - which leads to negative growth.

E. Government can improve education levels and benefits for larger families. This would cause people to want to have more kids and a bigger family.

F. Life expectancy would be higher in urban areas because there would be better access to health care. There would also be more health care buildings around so it'd be easier and quicker to get to health care buildings.

G. Low birth rates would impact population overtime over the age of 65 because the percent would be really low. Since there's

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low birth rates now, there's ~~might~~ going to be a smaller population percent in the future.

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Question 3

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

In this two-stimulus question, students were expected to examine the causes and impacts of a country as it enters stage 5 of the demographic transition model (DTM). The two stimuli were 1) a graphical representation of the demographic transition model and 2) a table displaying demographic data on birth rates, death rates, and percent of population over age 65 for seven selected countries (Croatia, Estonia, Germany, Greece, Japan, Portugal, Romania). For all seven countries, as of 2019, the birth rates were lower than the death rates, meaning that these countries had negative rates of natural increase (RNI).

Students were expected to draw from two main units for this question, Unit 2 (Population and Migration Patterns and Processes) and Unit 7 (Industrial and Economic Development Patterns and Processes). The main skills for this question were found in Skill Category 2 (Spatial Relationships) and Skill Category 3 (Data Analysis). Additional skills for this question were found in Skill Category 1 (Concepts and Processes) and Skill Category 5 (Scale Analysis).

In part A students were asked to select one country listed in the table and identify its stage in the demographic transition model.

In part B, prompted by a correct interpretation of the graph and table indicating all countries in the table have a negative RNI, students were asked to define the concept of a pronatalist policy.

In part C students were asked to explain one factor that affects birth rates as countries move from stage 3 to stage 4 in the demographic transition model.

In part D students were asked to describe one likely economic effect when countries have negative population growth.

In part E students were asked to describe a policy that a government might develop in response to demographic change based on the data shown in the table.

In part F students were asked to explain why the life expectancy in urban areas may be higher than the life expectancy in the entire country.

In part G students were prompted to use the data shown in the table to explain how, over time, low birth rates may impact the country's percent of population over age 65.

Question 3 (continued)

Sample: A

Score: 6

The response to part A earned 1 point because it correctly identifies that “Japan is the 5th stage of the demographic transition model,” as stated in A1.

The response to part B earned 1 point because it correctly defines the concept of a pronatalist policy as one that is “proposed to increase the fertility rate/the birth rate in a country that currently has a low birth rate.” This response corresponds with policies being designed to increase the birth rate, as stated in B3.

The response to part C earned 1 point because it correctly explains one factor that affects birth rates as countries move from stage 3 to stage 4 in the demographic transition model. This response correctly explains that “more & more women are joining the workforce making it less likely for a woman to have many children as they are now focused more on work.” This response corresponds with increased access to education and/or employment of women being generally associated with lower fertility, as stated in C2.

The response to part D earned 1 point because it correctly describes one likely economic effect when countries have negative population growth. The response correctly describes that “there will be less & less people in the work force as times goes on. An example of this would be Japan that currently has a very high elderly-dependency population that puts a strain on the working population. Who’s money is used to support retirements for the elder.” This response corresponds with a country with a high elder dependency ratio spending more money on programs for the elderly or retired, as stated in D1.

The response to part E earned 1 point because it correctly describes a policy that a government might develop in response to demographic change. The response correctly states that a government “might develop pronatalist policy for countries in stage 5 of the demographic transition model. This will help promote the birth rate that was starting to decrease.” This response corresponds with governments implementing pronatalist or population growth policies, as stated in E1.

The response to part F earned 1 point because it correctly explains one reason why the life expectancy in urban areas may be higher than the life expectancy in the entire country. The response correctly explains that urban areas have higher life expectancies because there is “more access to healthcare systems such as hospitals and clinics.” This response corresponds with urban areas having better access to health care, as stated in F1.

The response to part G did not earn a point because it incorrectly explains how, over time, birth rates may impact a country’s percent of population over age 65. The response incorrectly focuses on economics and explains that “if there are less people in the workforce from the low birth rate, there is no working population that can support it.” The response would have earned the point if it had explained that low birth rates may lead to an increase in the percent of population over age 65 because the overall population ages and/or there are fewer children, as stated in G1.

Question 3 (continued)

Sample: B

Score: 5

The response to part A earned 1 point because it correctly identifies that “Japan” is in “Stage 5” of the demographic transition model, as stated in A1.

The response to part B earned 1 point because it correctly defines the concept of a pronatalist policy as a “government giving positive incentives for having children, such as free childcare, maternity leave ... and paternity leave.” This response corresponds with government programs providing incentives for increasing fertility rates and/or population growth, as stated in B2.

The response to part C did not earn a point because it incorrectly explains one factor that affects birth rates as countries move from stage 3 to stage 4 in the demographic transition model. The response incorrectly explains that countries may not have “enough youth to support high birth rates, and too many elderly who can’t have children either.” This response would have earned the point if it had explained that increased access to healthcare, contraceptives, and/or family planning information tends to reduce the number of children born, as stated in C1.

The response to part D earned 1 point because it correctly describes an economic effect when countries have negative population growth as “not enough people ... able to support a country’s job & employment necessities.” This response corresponds with countries not having a large enough workforce to support the economy, as stated in D3.

The response to part E earned 1 point because it correctly describes a policy that a government might develop in response to demographic change. The response correctly describes that “a pronatalist policy can come into effect if a country’s government wants their birth rates to increase because of a lack in youth.” This response corresponds with governments implementing pronatalist or population growth policies, as stated in E1.

The response to part F earned 1 point because it correctly explains one reason why the life expectancy in urban areas may be higher than the life expectancy in the entire country. The response correctly explains that urban areas have higher life expectancies because they “have better access to healthcare, hospitals, easier transportation.” This response corresponds with urban areas having better access to health care, as stated in F1.

The response to part G did not earn a point because it incorrectly explains how, over time, low birth rates may impact the country’s percent of population over age 65. The response incorrectly explains that “low birth rates can cause the percentage of the population over 65 to decrease.” The response would have earned the point if it had explained that low birth rates may lead to an increase in the percent of population over age 65 because the overall population ages and/or there are fewer children, as stated in G1.

Question 3 (continued)

Sample: C
Score: 3

The response to part A did not earn a point because it incorrectly identifies “Romania” as being “near in stages one and two of the Demographic transition model.” The response would have earned a point if it had identified Romania as a stage 4 or stage 5 country, as stated in A1.

The response to part B did not earn a point because it incorrectly defines the concept of a pronatalist policy as “when a group of people agree with an argument.” The response would have earned a point if it had defined pronatalist policies as those that encourage or promote population growth, as stated in B1.

The response to part C earned 1 point because it correctly explains one factor that affects birth rates as countries move from stage 3 to stage 4 in the demographic transition model. The response correctly explains that “the CBR decreases in stages 3 and 4 because women are out getting jobs ... This would make them want to delay marriage and having kids.” This response corresponds with increasing access to education and/or employment of women being associated with lower fertility, as stated in C2.

The response to part D did not earn a point because it incorrectly describes one likely economic effect when countries have negative population growth. The response incorrectly describes “one economic effect that can lead to negative population growth is when health care isn’t good.” The response would have earned a point if it had described how a country with an aging population may spend more money on programs for the elderly or retired, as stated in D1.

The response to part E earned 1 point because it correctly describes a policy that a government might develop in response to demographic change. The response correctly describes that a government might establish a policy that “can improve education levels and benefits for larger families. This would cause people to want to have more kids and a bigger family.” This response corresponds with the governments implementing pronatalist or population growth policies, as stated in E1.

The response to part F earned 1 point because it correctly explains that urban areas have higher life expectancies than the average life expectancy in the entire country because there is “better access to health care.” This response corresponds with urban areas having better access to health care, as stated in F1.

The response to part G did not earn a point because it incorrectly uses data from the table to explain how, over time, low birth rates may impact the country’s percent of population over age 65. The response incorrectly explains that “low birth rates would impact population overtime over the age of 65 because the percent would be really low.” The response would have earned the point if it had explained that low birth rates may lead to an increase in the percent of population over age 65 because the overall population ages and/or there are fewer children, as stated in G1.