Question 2

7 Points: $1 + 2 + (2 + 2)$

A. Identify the predominant ranges of the infant mortality rate found in South Asia and western Europe.
   Must identify both for 1 point.

   South Asia: 30–59 and western Europe: 2–14

B. Describe TWO economic reasons for the level of the infant mortality rates in western Europe.
   (2 points: 1 point for each description, which must move beyond a simple word or phrase to receive the point.)

<table>
<thead>
<tr>
<th>B1</th>
<th>Universal health care or affordable health care provides access to health care for the mother and infant in prenatal stages and/or in the first year of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1A</td>
<td>Mothers and infants have access to health care workers</td>
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<tr>
<td>B1B</td>
<td>Sufficient health facilities for mothers and infants</td>
</tr>
<tr>
<td>B2</td>
<td>Higher standard of living</td>
</tr>
<tr>
<td>B2A</td>
<td>Provide greater access to consistent and sufficient healthy foods</td>
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<tr>
<td>B2B</td>
<td>Provide for better sanitation and hygiene (sanitation infrastructure)</td>
</tr>
<tr>
<td>B3</td>
<td>Post-industrial economies allow for increased care for infants</td>
</tr>
<tr>
<td>B3A</td>
<td>Parental leave</td>
</tr>
<tr>
<td>B3B</td>
<td>Access to childcare providers</td>
</tr>
<tr>
<td>B4</td>
<td>Developed economies allow for more investment in health care</td>
</tr>
<tr>
<td>B4A</td>
<td>Higher incomes mean people can afford to pay for other services that improve health and well-being</td>
</tr>
<tr>
<td>B4B</td>
<td>Strong social welfare programs mean that parents get more information or training about taking care of the new baby</td>
</tr>
<tr>
<td>B4C</td>
<td>Strong social welfare programs mean that infants receive sufficient food</td>
</tr>
<tr>
<td>B5</td>
<td>Education improves lives</td>
</tr>
<tr>
<td>B5A</td>
<td>Reduces adolescent fertility</td>
</tr>
<tr>
<td>B5B</td>
<td>More knowledge of child care and nutrition</td>
</tr>
<tr>
<td>B5C</td>
<td>Women have fewer children, leading to better infant and child health</td>
</tr>
</tbody>
</table>

C. Identify and explain a specific way in which each of the following TWO United Nations Sustainable Development Goals are intended to affect infant mortality rates in a rural community in South Asia.
   (4 points: [1 identification + 1 explanation] + [1 identification + 1 explanation]). See table on the next page.
<table>
<thead>
<tr>
<th>UN SDG</th>
<th>Identification</th>
<th>Explanation of Intended Positive Impact on IMR</th>
</tr>
</thead>
</table>
| Quality education (2 points) | C1. Improves lives  
C2. Increases access to health care services | A. Knowledge of nutrition, family planning, prenatal and infant care, vaccination leading to healthier babies  
B. Knowledge of diseases (e.g., HIV/AIDS, malaria) and prevention lessens likelihood of infant deaths |
| C3. Creates more well-trained medical workers (e.g., midwives, home health care providers, nurses, doctors) | A. Support for mothers and new babies before, during, and after childbirth  
B. A lower incidence of infant mortality will result in lower fertility rates, as parents realize that their successful, healthy children will not require them to have more babies to replace children who might have previously died in infancy or childhood. |
| C4. Increases skills for employment | A. Decent jobs reduce poverty and hunger by providing economic opportunities (e.g., infant care, better housing, improved diet) and reduced IMRs  
B. Women who work tend to have fewer children, leading to better infant and child health  
C. More access to skills and opportunities, which creates wealth and leads to lower IMR |
| C5. Improves standard of living | A. Afford better health care, which decreases IMR  
B. Afford better facilities, infrastructure, and/or institutions, which decreases IMR |
| C6. Removes barriers to girls’ education | A. Not having to work to pay or support brothers’ education  
B. Remove cultural practices favoring education for boys over girls  
C. Decrease the number of activities for girls that take them away from education (e.g., water gathering) |
| C7. Promotes peace and nonviolence | A. Efforts to end domestic violence (safety of mother and infant)  
B. Less war decreases chances for high IMRs |
| Clean water and sanitation (2 points) | C8. Improves access to safe and affordable drinking water | A. Reduced opportunity cost of time and energy spent on collecting water may allow girls to go to school and work, leading to reduced fertility rate |
| C9. Creates better sanitation and hygiene | B. Reduction in disease (e.g., diarrhea, infections) leading to lower IMRs  
C. Improved health of mother leading to lower IMR  
D. Drought afflicts some of the world’s poorest countries worsening hunger and malnutrition among infants |
| C10. Reduces water scarcity | E. Appropriate management of water resources can increase the availability of food for women and infants, thus lowering the IMR  
F. Application of technology, such as irrigation, can increase agricultural productivity and may increase food availability for that community |
| C11. Improves sustainable water management | }
A. The predominant range of IMR in South Asian countries (India, Pakistan, Nepal, Bangladesh) would be between 30 deaths per 1,000 births and 50 deaths per 1,000 births. The IMR range in Western Europe (England, Ireland, Spain, France) would be between 2 deaths per 1,000 births and 14 deaths per 1,000 births.

B. One economic reason for the low level of IMR in Western Europe is the high quality of welfare or healthcare. Western Europe has more advanced medical technology, which means the pregnant women are healthier and can carry out birth in a safer and more sanitary environment. Another economic reason is that the average income (GDP) of a household is higher than other underdeveloped regions of the world. This means families are wealthier and can afford to keep babies alive, and prevent them from dying from birth defects or prenatal illnesses.

C. Quality education can reduce the IMR in South Asia, because children will gain solid knowledge on how birth works and will be taught sex education. This could prevent unhealthy pregnancies at a young age. It
would also teach basic medical knowledge. This might result in more healthy pregnancies and births due to better nutrition during pregnancy. Clean water and sanitation could positively affect a rural community in South Asia because cleaner and more sanitary environments mean safer and less risky births. Babies wouldn't be exposed to harmful bacteria and illnesses at birth, meaning less infants would die. Cleaner water means that the water would be free from harmful pollutants and diseases. This would reduce the IMR because less babies would die early on from water borne diseases. It also means mothers wouldn't drink contaminated water which would possibly harm the baby in her womb.

GO ON TO THE NEXT PAGE.
a) In South Asia, the predominant infant mortality rate is 30 to 59. However, in western Europe, the predominant infant mortality rate is 2 to 14.
b) One economic reason for the low infant mortality rate in western Europe is the fact that most of the countries in this area are MDCs. Being more developed means they have better access to healthcare, leading to lower infant mortality rates. Another economic reason is the technological advancements in sanitation. This means the cities are more clean, and infants are less likely to get sick from poor living conditions.
c) 1. Quality education in rural South Asia is a goal because the UN wants people to be more informed, especially women. Increased education for women will lead to a decrease in birth rates and infant mortality rates as well because women will be more informed.
   2. Clean water and sanitation is a goal because it will lead to an improvement in the overall health of the people in a community. An improvement in health means that less infants will die, lowering the infant mortality rate.
2a. The more predominant ranges of the IMR are more near the Southeast side of Asia. This area range is mostly near the southern part of Europe, near Africa.

2b. One economic reason as to why the IMR is high in Western Europe is because poverty rates are high in those ranges. With poverty being high many people can’t afford medical care to treat diseases and other things that can lead to death. A second reason economic reason on why IMR are high in those ranges is children being expensive for many families. Taking care of a baby is quite a bit of money for food, clothing, and etc. Families experiencing more poverty often have larger families which can make families not be able to feed, or afford the baby which can also lead to death.

2c. Quality education can affect IMR by giving people more of an education on how to prevent having too many babies.
education can also help get people jobs better jobs so they can afford to have kids. This can lead to less poverty and a less high IMR. Clean water and sanitation can affect IMR by reducing the amount of illness. Clean water that isn't clean can cause infants to catch diseases and harmful bacteria, therefore clean water is really good and can help reduce the level of IMR. Sanitation can also help reduce the amount of deaths because sanitation reduces the amount of illnesses.
Question 2

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

Overview

This question was expected to demonstrate students’ abilities across several aspects of the course. In part A, students were expected to understand that maps are used to represent and identify spatial patterns, demonstrate regional thinking, applied at the local, national, and global scales, and understand that “demographic factors that determine population growth are fertility, mortality, and migration. While on the surface this part of the question seemed quite simple, it was not.

In part B, students were expected to demonstrate knowledge that measures of development are used to understand patterns of social and economic differences at a variety of scales. Students were also expected to be able to describe how western Europe’s economic development levels impact the region’s infant mortality rates.

In part C, students were expected to demonstrate an understanding of how two different Sustainable Development Goals (SDGs) apply to rural communities in South Asia. At its highest level, the question measures students’ understanding of spatial patterns, measures of development, and the SDGs.

Sample: 2A
Score: 7

The response earned full credit and demonstrates a comprehensive understanding of the issues regarding infant mortality in South Asia and western Europe. The response earned 1 point in part A for correctly identifying the predominant ranges in South Asia as between 30 and 59 deaths per 1,000 births and in western Europe as between two and 14 deaths per 1,000 births. The response earned 1 point for describing the availability of affordable healthcare that allows access to safe, high-quality facilities, which leads to lower infant mortality rates. (B1B) The response earned an additional 1 point in part B for describing how a higher standard of living allows families to better take care of their babies in a more sanitary environment. (B4A) The response earned 1 point in part C for identifying that a quality education positively affects infant mortality rates. (C1) The response earned an additional 1 point in part C for explaining that the knowledge gained from education leads to increased prenatal care, better nutrition, and more vaccinations for children. (C1A) The response earned 1 point in part C for identifying access to safe water, sanitation, and hygiene. (C8) The response earned an additional 1 point in part C for explaining that access to clean water leads to a reduction in disease and lower infant mortality rates. (C8B)

Sample: 2B
Score: 5

The response earned 1 point in part A for correctly identifying the predominant ranges in south Asia as between 30 and 59 deaths per 1,000 births and in western Europe as between two and 14 deaths per 1,000 births. The response earned 1 point in part B for describing that the developed economies of western Europe have better access to health care, which leads to lower infant mortality rates. (B4A) The response earned an additional 1 point in part B for describing that technological advancements are associated with better sanitation, leading to lower infant mortality rates. (B2B) The response earned 1 point in part C for identifying that education of women improves lives of infants and children. (C1) The response earned no credit for the explanation point as the discussion of birth rates is very general and not explained in terms of nutrition, family planning, or prenatal or infant care. The response did not earn the second identification point in part C as clean water and sanitation is a
repeat of the question prompt. The response earned 1 point in part C for explaining that an improvement in overall health will lower the infant mortality rate. (C8B)

Sample: 2C
Score: 3

No points were earned in part A because specific ranges of infant mortality rates in South Asia or western Europe are not provided. The response earned no points in part B as the descriptions provided are contradictory to economic development and to fertility rates in western Europe. The response earned 1 point in part C for identifying that a quality education positively affects infant mortality rates. (C1) The response earned an additional 1 point in part C for explaining that education improves knowledge of family planning. (C1A) The response did not earn the second identification point in part C because no information is provided beyond restating the prompt of clean water and sanitation. The response earned an additional 1 point in part C for explaining that a reduction in disease will reduce infant mortality rates. (C8B)