Question 1

What was the intent of this question?

This question focused on key geographic principles related to the analysis of recent patterns and processes of human spatial behavior. Specifically, it required students to show an understanding of the fundamental principles of core-periphery relations, distance-decay relationships, and chain migration, and then apply these principles specifically to patterns of international migration. As stimulus, a map was provided that showed major and minor migration streams at the international scale in the late twentieth century. Each of the migration streams, 11 in all, was identified by letter.

In part A students were asked to define each of the three principles: core-periphery; distance decay; and chain migration. In part B students were then instructed to select a migration stream for each of the three geographic principles and discuss how that stream illustrated the principle. Each migration stream could be used only once.

This question tested knowledge of the “Population” section of the topic outline found in the AP Human Geography Course Description, particularly the “Population movement” item. In addition, the key geographic principles are related to the first section of the outline, “Geography: Its Nature and Perspectives,” especially the item “Key concepts underlying the geographical perspective.” Material from the “Industrialization and Economic Development” section (e.g., “Evolution of economic cores and peripheries” in the topic outline) was also useful for answering this question.
How well did students perform on this question?

Many students correctly defined one or more of the three geographic principles in part A. Of these, chain migration proved to be the easiest for students to define; core-periphery was the most difficult. Of the students who correctly defined one or more principles in part A, several then identified an appropriate migration stream to illustrate them. Fewer students, however, provided complete discussions in part B. Overall, students were most familiar with migration flows to North America and, to a lesser extent, Europe. Of the three principles, students seemed most comfortable applying chain migration to the context of specific migration streams and providing appropriate discussion.

This question differentiated among four groups of students. Students who were unfamiliar with the key geographic concepts typically earned 0–1 point. Those familiar with one or more of the concepts, and who applied them to specific migration streams, earned 2–4 points. Students who provided appropriate definitions of the geographic concepts and linked them to several appropriate migration streams earned 5–6 points. Finally, students who provided additional discussion of one or more migration streams earned 7–9 points. Students did moderately well on this question. The mean score was 3.31, 36.8 percent of the possible score of 9 points.

What were common student errors or omissions?

- Many students had difficulty defining the concept of core-periphery. Some defined and discussed it at the urban level (e.g., central business districts, suburbs, urban–rural contrasts) rather than at the international scale appropriate to the context of the question. Others discussed core-periphery as one word but did not attempt to make any distinction between core and periphery. In part B some students reversed their application of the terms core and periphery when discussing the direction of migration flow.
- Several students confused the principle of distance decay with the concept of time–space convergence or intervening opportunities.
- Many students confused the principle of chain migration with intervening opportunities, step migration, or mass migration.
- Students often had difficulty applying abstract concepts to real-world geographic phenomena in part B.
- Many students correctly identified appropriate migration streams for each principle but did not provide sufficient discussion in part B to earn full credit.
- In part B many students used historical examples of migration (e.g., transcontinental railroad, gold rush), although the context of the question was the late twentieth century. Contemporary examples and discussions were more likely to earn points.
- Some students misinterpreted the migration streams shown on the map, especially the arrows depicting multiple origins or destinations.
- Not all information on the map provided (or any map) is equally useful for a given purpose. Some students seemed not to carefully or strategically select migration streams to discuss in part B.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

See suggestions at the end of the discussion of question 3.
Question 2

What was the intent of this question?

This question required a synthesis of concepts related to the impacts of current global economic forces on the local level, in a specific geographic context. A photograph of a customer service call center building was used as stimulus. The building, located in a small town in Arkansas, had previously been used as an automobile parts manufacturing center. It thus represented a shift from the secondary (manufacturing) sector to the tertiary (service) sector. Part A asked students to identify two reasons why businesses would choose to locate their call centers in small southern towns. Part B asked students to identify three disadvantages to using call centers as a local economic development strategy. The question thus required a change in perspective, from the firm’s point of view in part A to the community’s point of view in part B.

This question required students to apply their knowledge of material in the “Industrialization and Economic Development” section of the AP Human Geography topic outline. In particular, students were prompted to integrate, in a real-world context, concepts from several topics in this section, including “Deindustrialization and economic restructuring,” “Local development initiatives,” and “Geographic critiques of models of economic localization.” Students could also incorporate concepts related to globalization, which is discussed in several places in the AP Human Geography Course Description, including the “Industrialization and Economic Development” section of the topic outline (e.g., the relationship between local communities and the global economy).

How well did students perform on this question?

In part A a number of students identified reasons why businesses would choose to locate call centers in small southern towns. Usually these reasons were related in some way to “low costs” (e.g., low wage structure, low taxes, low land costs, low building costs). A few students identified the business climate or the labor pool available because of deindustrialization. In part B students had more difficulty discussing three disadvantages from the community’s perspective. Some named low wages, the footloose nature of the new business, or the relatively low skill level associated with the new jobs. A few students recognized the importance of linkages at the local level (e.g., impact on the local multiplier effect, level of local investment) and the national or international level (e.g., outside ownership of footloose firms, global competition). The latter students tended to have more complete discussions in part B.

Thus, this question differentiated among three groups of students. Students in the lowest-scoring group, if they were familiar with the term call centers, provided only factors promoting their location in small southern towns. They earned 0–2 points in part A and none in part B. Some students went on to identify, but not completely discuss, disadvantages from the community’s point of view. They typically earned 3–5 points. Students providing complete discussions of one or more disadvantages typically earned 6–8 points; these essays tended to be very well crafted. Students did somewhat well on this question. The mean score was 2.10, 26.3 percent of the possible score of 8 points.
What were common student errors or omissions?

- Many students were unfamiliar with the term customer service call center or could not apply their knowledge of the term to the issues raised in the question.
- Several students did not change the perspective in part B from that of the firm to that of the community, as required by the question. Instead they tried to discuss disadvantages to the firm of locating in small southern towns.
- Several students could not provide any meaningful disadvantages in part B.
- Many who correctly identified disadvantages in part B did not provide sufficient discussion to earn full credit.
- Some students provided elaborate answers for part A, which asked only for identification, and did not provide full discussions in part B.
- Some students answered the question solely at the urban scale or inappropriately applied models or concepts (e.g., central business district, von Thünen model).
- Some students used the phrases small southern town or small town in Arkansas as an excuse to engage in shallow regional stereotyping rather than to apply key concepts in economic geography.
- Many students had a poor understanding of the importance of local economic linkages, national–local linkages, and international–local linkages in analyzing recent developments in economic systems.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

See suggestions at the end of the discussion of question 3.

Question 3

What was the intent of this question?

This question required students to show their understanding of important political geography concepts and apply them in a specific geographic context. Specifically, it focused on the concepts of centripetal and centrifugal forces, as used in political geography, in the context of South Asia. A map of South Asia was provided as stimulus. In part A students were asked to define the concepts “centripetal force” and “centrifugal force.” In part B they were asked to give an example of and explain a centripetal force that affects the viability of any state shown on the provided map. In part C they were asked to do the same for centrifugal force.

This question tested students’ knowledge of material from the “Political Organization of Space” section of the AP Human Geography topic outline and their ability to apply that knowledge. Several topics within this section of the outline are related to the question of factors supporting or challenging the viability of a state. Related items include “The nation-state concept,” “Challenges to inherited political-territorial arrangements,” “Fragmentation, unification, alliance,” and “Spatial relationships between political patterns and patterns of ethnicity, economy, and environment.” Depending on the centripetal and centrifugal factors chosen, students could also draw on their knowledge of several other sections of the topic outline, especially the section “Cultural Patterns and Processes.”
**How well did students perform on this question?**

Many students provided correct definitions of the concepts of centrifugal forces and centripetal forces in part A. Many others, however, seemed unfamiliar with the concepts, at least within the context of political geography. Correct responses in parts B and C depended to a large degree on whether correct definitions had been provided in part A. Some students received full credit for part B but not part C, or vice versa. Other students received partial credit for one or both parts. In general, though, once an appropriate example was chosen, a sufficiently strong explanation was given to receive full credit for that part of the question. Overall, students seemed more able to apply the concept of centripetal force to the context of South Asia (in part B) than they could apply the concept of centrifugal force (in part C).

Thus, this question differentiated among three groups of students. The first group (0–1 points) was unfamiliar with the relevant concepts in part A and thus provided incorrect or incomplete definitions. The second group (2–4 points) provided correct definitions and often gave a correct example and explanation in either part B or part C. The third group (5–6 points) generally provided correct definitions and good examples and explanations for parts B and C. Students did somewhat well on this question. The mean score was 1.67, 27.8 percent of the possible score of 6 points.

**What were common student errors or omissions?**

- Some students reversed the definitions of centripetal force and centrifugal force.
- Some students provided definitions of centripetal force and centrifugal force relevant to other disciplines (e.g., physics) rather than political geography, which was the context of the question.
- Many students confused centripetal and centrifugal forces with push and pull factors of migration.
- Some students used the same example for parts B and C, contrary to the directions in the question.
- Several students discussed centripetal/centrifugal forces at an inappropriate geographic scale, that is, at the regional level rather than at the state level.
- Some students provided valid examples of centripetal and centrifugal forces but did not relate them to one of the countries shown on the map.
- Some students provided valid examples of social, cultural, or political forces with no explicit connection to the viability of a state. Such responses often related more generically to external conflicts or cooperation between states, or to internal social welfare or distress within states, without a clear reference to the viability of a state as an entity.
- Several students misidentified the area of the world shown on the map and referenced countries not shown.

**Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?**

The following is a summary of ideas that were generated in discussion and collaboration with the 121 Readers and Question and Table Leaders of the 2006 AP Human Geography Exam. They reflect the wisdom of members of this group, who have firsthand experience with both teaching the course and scoring the exam, using scoring guidelines developed specifically for these questions.

- Focus on the *AP Human Geography Course Description*, and consult a wide variety of related materials when preparing for class to ensure comprehensive coverage.
• Encourage students to take five minutes per question to carefully read the question, taking the time to interpret correctly any stimulus material, and to outline their responses in a manner consistent with the structure of the question. Teach them not to restate the question or write introductions and conclusions. They should directly answer the question.

• Teach students to organize responses into sections, using the structure of the question as a guide, and to begin each question on a new page. Stress the importance of writing legibly. Consider teaching them to underline key points, ideas, and phrases in their answers.

• Offer students practice exams that give them an opportunity to respond to structured 20-minute free-response questions. Replicate the experience of the AP Exam in your classroom as much as possible. Consider practice exams with two to three questions to give students experience with time management and switching gears from one question to another. Involve students in the scoring of these exams to familiarize them with the kinds of answers that earn credit.

• Make sure students understand what is expected when words like explain, define, identify, and discuss are used in a question. Have them practice responses to such prompts.

• Teach students to be explicit and precise in their responses, and remind them not to assume that unstated information and arguments will be taken for granted by the Reader.

• Stress interconnections across different sections of the topic outline. Encourage students to integrate concepts from different areas of the course.

• Ensure that students are familiar with relevant vocabulary. Encourage them to define terms in their own words to help them understand key geographic concepts and to apply these concepts to a variety of real-world contexts.

• Teach students to become familiar with applying concepts and with analyzing spatial processes and linkages across multiple geographic contexts and on a variety of scales.

• Although AP Human Geography is not a map-reading or world geography course, make certain that students have a basic level of geographic literacy. When answering question 1, several students incorrectly identified countries or even continents. For question 3, several could not identify any of the countries on the map.

• Integrate current events into course material and class discussions of geographic concepts.

• Teach students to be analytical, to focus on the geographic and spatial aspects of questions, and to develop process-oriented responses when appropriate.

• Students should be reminded to treat each free-response question independently. Each question is scored separately, but several Readers noted “spillover” or “follow-up” discussion of other questions on the exam.

• Use the resources on AP Central® (http://apcentral.collegeboard.com) to access contemporary teaching materials, case studies, teaching tips, and questions from past exams. The AP Human Geography Electronic Discussion Group is also used by college and high school faculty as an active forum for the exchange of ideas about teaching the course. Consider applying to be an AP Exam Reader.