

HUMAN GEOGRAPHY

Two hours and fifteen minutes are allotted for this exam: 1 hour for Section I, which consists of multiple-choice questions; and 1 hour and fifteen minutes for Section II, which consists of essay questions. Section I is printed in this exam booklet. Section II is printed in a separate booklet.

SECTION I

Time — 1 hour

Number of questions — 75

Percent of total grade — 50

Section I of this exam contains 75 multiple-choice questions and 12 survey questions. Therefore, please be careful to fill in only the ovals that are preceded by numbers 1 through 87 on your answer sheet. No calculators may be used on this exam.

General Instructions

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE INSTRUCTED TO DO SO.

INDICATE ALL YOUR ANSWERS TO QUESTIONS IN SECTION I ON THE ANSWER SHEET. No credit will be given for anything written in this exam booklet, but you may use the booklet for notes or scratch work. After you have decided which of the suggested answers is best, COMPLETELY fill in the corresponding oval on the answer sheet. Give only one answer to each question. If you change an answer, be sure that the previous mark is erased completely.

Example:

Chicago is a

- (A) state
- (B) city
- (C) country
- (D) continent
- (E) village

Sample Answer

(A) ● (C) (D) (E)

Many students wonder whether or not to guess the answers to questions about which they are not certain. In this section of the exam, as a correction for haphazard guessing, one-fourth of the number of questions you answer incorrectly will be subtracted from the number of questions you answer correctly. It is improbable, therefore, that mere guessing will improve your grade significantly; it may even lower your grade, and it does take time. If, however, you are not sure of the best answer but have some knowledge of the question and are able to eliminate one or more of the answer choices as wrong, your chance of answering correctly is improved, and it may be to your advantage to answer such a question.

Use your time effectively, working as rapidly as you can without losing accuracy. Do not spend too much time on questions that are too difficult. Go on to other questions and come back to the difficult ones later if you have time. It is not expected that everyone will be able to answer all of the multiple-choice questions.

HUMAN GEOGRAPHY

SECTION I

Time—60 minutes

75 Questions

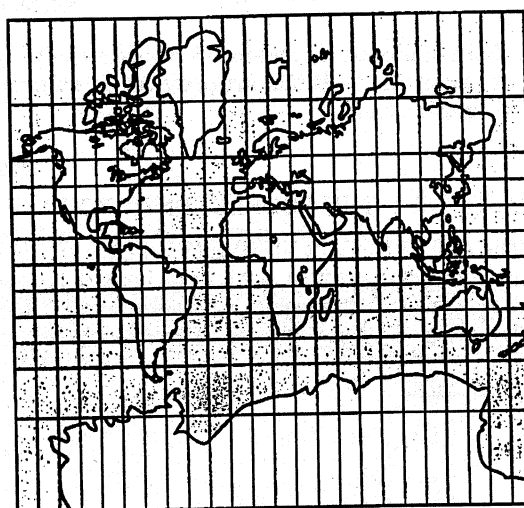
Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case and then fill in the corresponding oval on the answer sheet.

1. Which of the following profiles characterizes the population group that is the most likely to migrate?

(A) Married, twenty-five years old
 (B) Single, twenty-five years old
 (C) Married, fifty years old
 (D) Single, fifty years old
 (E) Married, sixty-five years old

2. Production of agricultural products destined primarily for direct consumption by the producer rather than for market is called

(A) plantation farming
 (B) hunting and gathering
 (C) subsistence agriculture
 (D) sedentary cultivation
 (E) shifting-field agriculture

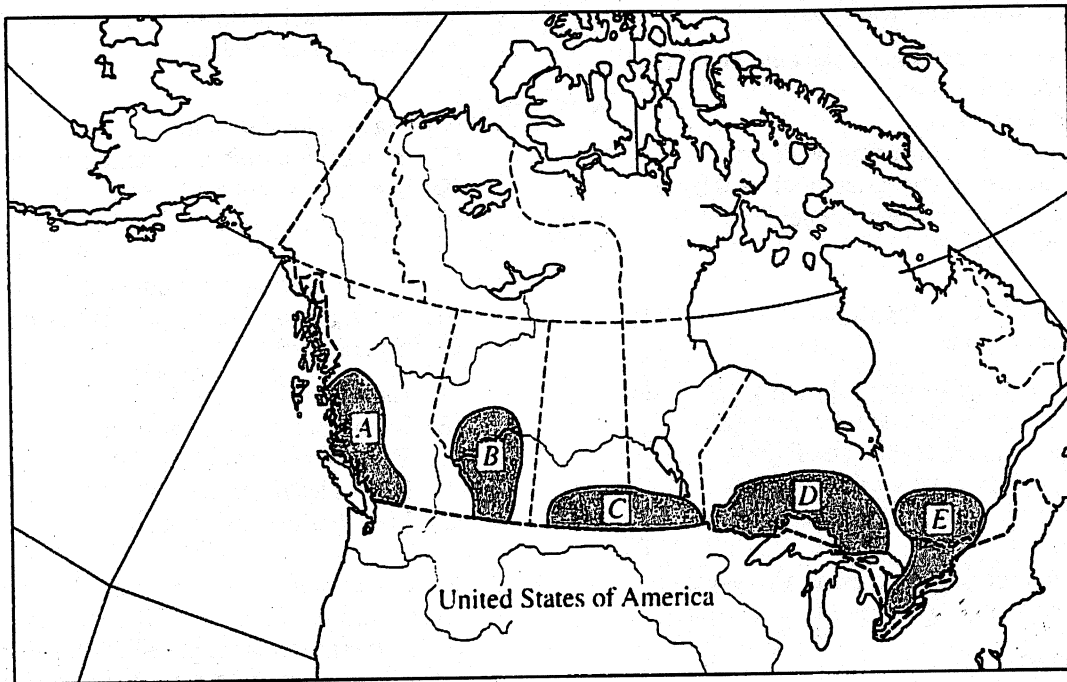


3. The map above represents what kind of projection?

(A) A Mercator projection with distorted land areas
 (B) A planar projection with diverging lines at the poles
 (C) A homolosine projection with continuity of landmasses
 (D) A Robinson projection with distortions at the equator
 (E) A gnomonic projection with distortions of bodies of water

Section I

4. Dramatic increases in global grain production since 1950 have been made possible by
- (A) substantial increases in the amount of land under cultivation
 - (B) global warming
 - (C) an increase in the urban workforce
 - (D) an increase in the agricultural workforce
 - (E) an increase in the use of energy and technology
5. In the United States, the largest concentrations of Amish are found in
- (A) Rhode Island, New York, and West Virginia
 - (B) Tennessee, Arkansas, and Kentucky
 - (C) Minnesota, Michigan, and Illinois
 - (D) Pennsylvania, Ohio, and Indiana
 - (E) Utah, Arizona, and Nevada
6. In which of the following areas was wheat most probably domesticated earliest?
- (A) Southern Italy
 - (B) Northern Libya
 - (C) The plateau of central Mexico
 - (D) Eastern China
 - (E) Southeastern Turkey
7. The literacy rate of any country correlates most closely with which of the following?
- (A) Per capita income
 - (B) Annual precipitation rates
 - (C) Petroleum production
 - (D) General level of intelligence
 - (E) Population density
8. In the early twenty-first century, the largest number of refugees is located on which of the following continents?
- (A) Africa
 - (B) Australia
 - (C) Europe
 - (D) North America
 - (E) South America
9. Traditionally, the Ganges Valley and the Nile Valley have had comparatively high population densities because of their
- (A) tropical climate
 - (B) heavy industrialization
 - (C) in-migration from neighboring arid areas
 - (D) intensive agriculture based on irrigation
 - (E) designation as sacred sites
10. All of the following twentieth-century migration streams were propelled by persecution or open conflict EXCEPT
- (A) Asians leaving Uganda
 - (B) Kosovars leaving Yugoslavia
 - (C) Tutsis leaving Rwanda
 - (D) Hindus leaving Pakistan
 - (E) Mexicans leaving Mexico
11. If four languages have similar words for numbers and the names of fish, but different names for a certain disease, what might be concluded about the time at which the disease first diffused?
- (A) The disease spread among a population that later divided and evolved into four different languages.
 - (B) The population divided and evolved into the four different languages, and then the disease spread.
 - (C) The disease spread to two different populations that later divided into two different languages.
 - (D) The disease and language spread to four different regions at the same time at the same rate.
 - (E) There can be no conclusions drawn about the initial diffusion of the disease based on language.
12. Which of the following correctly lists the usual hierarchy of political-administrative units in order from the largest to the smallest?
- (A) Empire, county, province, nation-state
 - (B) Province, empire, nation-state, county
 - (C) Empire, nation-state, province, county
 - (D) County, nation-state, province, empire
 - (E) Empire, nation-state, county, province



28. On the map above, which letter represents the region of the greatest proportion of the Canadian population?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

39. Which of the following modes of transportation is characterized by low terminal cost, high line cost, and high route flexibility?
- (A) Truck
 - (B) Railroad
 - (C) Ship
 - (D) Pipeline
 - (E) Airplane
40. A clustering of doctor's offices and pharmacies near hospitals is BEST explained by the benefits of
- (A) decentralization
 - (B) agglomeration
 - (C) intervening opportunity
 - (D) balkanization
 - (E) enfranchisement
41. Agriculture practiced in California differs from forms practiced in other Mediterranean agricultural regions because in California
- (A) grapes are grown for wine production
 - (B) farms use more irrigation
 - (C) farms are smaller
 - (D) farms rely on local labor
 - (E) wheat is grown in the winter as a cover crop
42. Which of the following has fostered the most significant economic growth by eliminating import tariffs between member states?
- (A) European Union (EU)
 - (B) Organization of Petroleum Exporting Countries (OPEC)
 - (C) North Atlantic Treaty Organization (NATO)
 - (D) Association of Caribbean States (ACS)
 - (E) United Nations (UN)
43. Which of the following is useful for describing a settlement node whose primary function is to provide support for the population in its hinterland?
- (A) Von Thünen's model of land use
 - (B) Concentric zone model
 - (C) Core-periphery model
 - (D) Rostow's model of economic development
 - (E) Christaller's model of central place
44. Which of the following environmental problems is most associated with the African Sahel?
- (A) Desertification
 - (B) Deforestation
 - (C) Air pollution
 - (D) Flooding
 - (E) Water pollution
45. During the nineteenth and twentieth centuries, which of the following types of intraregional migration was the most prominent worldwide?
- (A) Rural to urban
 - (B) Urban to suburban
 - (C) Inland to coastal
 - (D) Highland to lowland
 - (E) Urban to rural

Section I

46. The Internet is reshaping traditional economic arrangements by
- (A) reinforcing the dominance of the central business district for retail sales
 - (B) expanding the importance of express package delivery systems
 - (C) increasing the importance of rail transportation as compared to truck transportation
 - (D) bringing consumers and producers into face-to-face contact
 - (E) creating more enclosed shopping malls
47. In terms of total tonnage, which of the following is currently the leading export crop in the world?
- (A) Coffee
 - (B) Sugar cane
 - (C) Wheat
 - (D) Corn
 - (E) Rice

48. In the century after the arrival of Europeans, which of the following changes occurred to the indigenous population of the Americas?
- (A) It increased dramatically because of new trade routes and industries
 - (B) It increased slowly with the introduction of new crops
 - (C) It remained about the same, since very few Europeans actually moved there
 - (D) It decreased dramatically with the introduction of new diseases
 - (E) It decreased slowly due to increased competition for land
49. Which of the following is most characteristic of societies currently in the last stage of demographic transition?
- (A) Hyperinflation
 - (B) Unemployment
 - (C) Youth dependency
 - (D) Aging population
 - (E) Overpopulation

50. Which of the following most closely describes the leading trend in retailing in the United States during the 1950s, 1970s, and 1990s?

1950s	1970s	1990s
(A) Downtown business district	Shopping mall	"Big box" superstore
(B) Downtown business district	"Big box" superstore	Shopping mall
(C) Shopping mall	Downtown business district	"Big box" superstore
(D) "Big box" superstore	Downtown business district	Shopping mall
(E) "Big box" superstore	Shopping mall	Downtown business district

51. Land parcels in the American Midwest tend to be rectilinear because
- (A) the federal survey system adopted in the late eighteenth century imposed a geometric pattern on the landscape
 - (B) Native American settlement patterns were rectangular
 - (C) English-speaking settlers replicated the landscape patterns of England
 - (D) Spanish colonists laid out settlements in a rigid geometric pattern
 - (E) there were no mountains or rivers to use as boundaries
52. Which of the following environmental issues is of most immediate concern to policy-makers in New England?
- (A) Overharvesting of breeding stock by commercial fishers
 - (B) Oil-spill liability
 - (C) Desertification by overgrazing of cattle
 - (D) Intensification of urban heat islands
 - (E) Generation of electric power by wind
53. The popularity of which of the following is an example of the trend toward ecotourism?
- (A) Time-share condominiums on the coast of Spain
 - (B) Ski resorts in Chile
 - (C) National parks in Costa Rica
 - (D) Recreational canals in Florida
 - (E) Artificial lakes in Texas
54. The early stages of the core-periphery model describe the
- (A) relationship between the outward appearance of a place and its internal functioning
 - (B) ways that suburban workers commute to urban workplaces
 - (C) relationship between the underlying structure of a society and its outward expressions
 - (D) social and cultural differences between urban and rural people
 - (E) relationship of power and the transfer of resources from less developed to more developed areas
55. Which of the following terms refers to an area of instability located between regions with opposing political and cultural values?
- (A) Rimland
 - (B) Heartland
 - (C) Shatter belt
 - (D) Enclave
 - (E) Gerrymandered area
56. Violent confrontations in Ambon, Aceh, and East Timor illustrate the problem of holding together the physically and culturally diverse country of
- (A) India
 - (B) Indonesia
 - (C) Brazil
 - (D) South Africa
 - (E) Yugoslavia
57. Isolated farmsteads in the United States evolved as a result of all of the following EXCEPT
- (A) political stability
 - (B) colonization by individual pioneer families
 - (C) agricultural private enterprise
 - (D) government land policy
 - (E) physical barriers preventing communal farm practices
58. Which of the following was NOT a reason for rapid suburbanization in the United States after the Second World War?
- (A) Mass production of the automobile
 - (B) Reduction in long-distance commuting
 - (C) Expansion of home construction
 - (D) Expansion of the interstate highway system
 - (E) Availability of low down payment terms and long-term mortgages
59. Which of the following is an example of an ethnic religion?
- (A) Islam
 - (B) Mormonism
 - (C) Buddhism
 - (D) Judaism
 - (E) Roman Catholicism

Section I

60. According to the rank-size rule, if the largest city in a country has a population of 10 million, the next largest city will have a population of
- (A) 9 million
 - (B) 8 million
 - (C) 7.5 million
 - (D) 5 million
 - (E) 3.5 million
61. Which of the following countries did NOT have a significant, long-lasting colonial presence in Africa after 1920?
- (A) Germany
 - (B) Great Britain
 - (C) France
 - (D) Portugal
 - (E) Belgium

Item 62 was not scored.

63. Von Thünen emphasized which of the following factors in his model of agricultural land use?
- (A) Labor cost
 - (B) Transportation cost
 - (C) Fertilizer cost
 - (D) Machinery cost
 - (E) Seasonal fluctuations in prices of farm products
64. The provisions of the United Nations Conference on the Law of the Sea give coastal countries navigational and economic sovereignty over which of the following zones?
- (A) Twelve-nautical-mile territorial sea zone
 - (B) Export processing zone (EPZ)
 - (C) 200-nautical-mile exclusive economic zone
 - (D) Empowerment zone
 - (E) Continental shelf

65. The maquiladoras of northern Mexico are
- (A) manufacturing outsourcing plants
 - (B) illegal migrant-labor camps
 - (C) border squatter settlements
 - (D) organic agricultural cooperatives
 - (E) commercial produce farms
66. Which of the following is a characteristic of shifting cultivation?
- (A) Dependency on irrigation
 - (B) Sharecropping
 - (C) Production of cash crops for export
 - (D) Demand for wage laborers
 - (E) Multicropping
67. The "Four Economic Tigers" of East and South-east Asia include
- (A) China, Indonesia, Japan, and Taiwan
 - (B) Hong Kong, South Korea, Singapore, and Taiwan
 - (C) Japan, Philippines, South Korea, and Vietnam
 - (D) Hong Kong, Indonesia, Thailand, and Vietnam
 - (E) China, Philippines, Singapore, and Thailand
68. The term "cultural diffusion" refers to the
- (A) modification of Earth's surface by human actions
 - (B) integration of behavioral traits within a group
 - (C) spread of an idea or innovation from its source
 - (D) relationship between human cultures and their physical environment
 - (E) assimilation of a minority culture into the host society
69. Of the following, which is the best example of a footloose industry?
- (A) Wine making
 - (B) Steel
 - (C) Furniture
 - (D) Computer chip
 - (E) Tuna canning

70. Why is the traditional classification of agriculture as a primary economic activity a problem when considering the geography of agriculture?
- (A) Modern farmers are engaged in production, research, marketing, and some manufacturing of their products.
 - (B) Agricultural employment is such a small fraction of the labor force in the industrialized countries that agriculture can no longer be thought of as a primary economic activity.
 - (C) Unlike mining, forestry, and other primary activities, agriculture has not been affected by industrialization.
 - (D) Traditional patterns of farming are disappearing.
 - (E) Modern farmers use machinery.
71. Which of the following areas has the greatest linguistic fragmentation?
- (A) Korea
 - (B) Scandinavia
 - (C) Caucasus
 - (D) Argentina
 - (E) Quebec
72. Rostow's modernization model is concerned with which of the following concepts?
- (A) Dependency
 - (B) Structuralism
 - (C) Core-periphery relations
 - (D) Economic development
 - (E) Neocolonialism
73. According to the sector model of North American city structure, members of low-income groups tend to live in which of the following places?
- (A) The inner city only
 - (B) Peripheral temporary settlements
 - (C) Linear residential areas radiating from the center city outward
 - (D) Evenly dispersed throughout the urban area
 - (E) The suburbs and rural areas only
74. Of the following countries, which has the fewest people per unit of arable land?
- (A) Guatemala
 - (B) Bangladesh
 - (C) Argentina
 - (D) Netherlands
 - (E) Egypt
75. The Canadian government created the new territory of Nunavut in order to
- (A) re-create the pre-1912 boundary of Quebec
 - (B) recognize the territorial rights of indigenous people in the area
 - (C) facilitate the exploration of mineral resources in the Northwest Territories
 - (D) grant autonomy to the Cree and Mohawk people living in eastern Canada
 - (E) guarantee Canadian fishing rights in the Atlantic Ocean

END OF SECTION I

Section II

HUMAN GEOGRAPHY

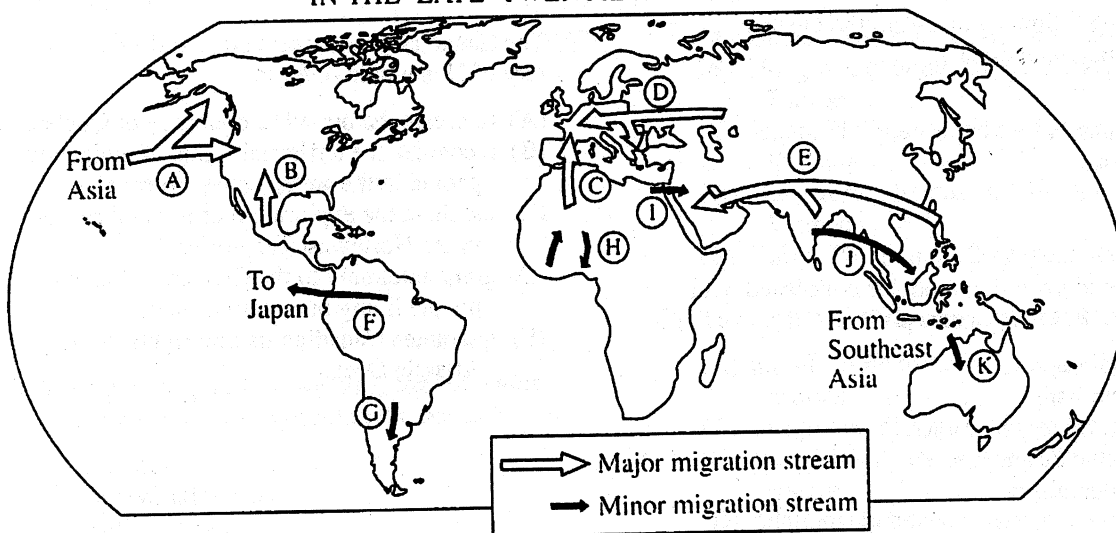
SECTION II

Time—75 minutes

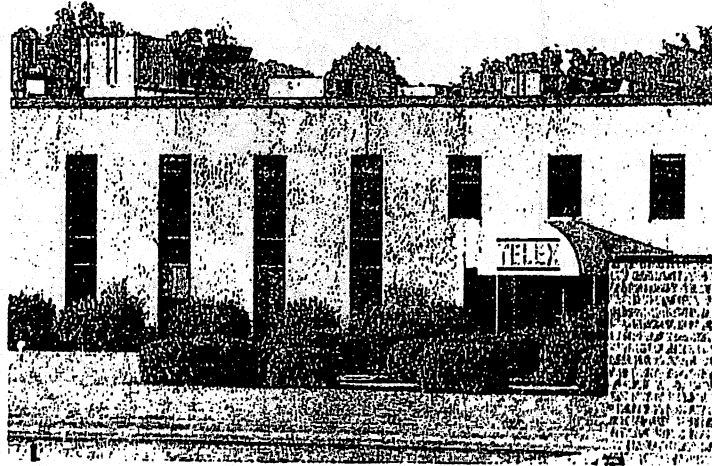
Percent of total grade—50

Directions: You have 75 minutes to answer all three of the following questions. It is recommended that you spend approximately one-third of your time (25 minutes) on each question. It is suggested that you take up to 5 minutes of this time to plan and outline each answer. While a formal essay is not required, it is not enough to answer a question by merely listing facts. Illustrate your answers with substantive geographic examples where appropriate. Be sure that you number each of your answers, including individual parts, in the answer booklet as the questions are numbered below.

SELECTED MIGRATION PATTERNS IN THE LATE TWENTIETH CENTURY

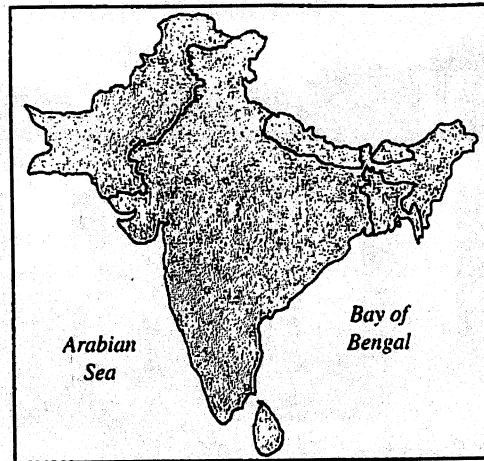


1. International migration in the late twentieth century illustrates many important geographic principles.
 - A. Define each of the following principles.
 1. core-periphery
 2. distance decay
 3. chain migration
 - B. For each principle in part A, select a migration stream identified by letter on the map above, and discuss how the stream you choose illustrates the principle. Note: Each lettered migration stream may be used only once.



2. The photograph above, taken in a small town in Arkansas, shows a customer service call center in a building that until recently was an automotive parts manufacturing plant.
- A. Identify two reasons why businesses would choose to locate their call centers in small southern towns.
 - B. Discuss three disadvantages in the use of call centers as a local economic development strategy.

Section II



3. The viability of any state depends on a balance between centripetal and centrifugal forces.
- A. Define the concepts "centripetal force" and "centrifugal force."
 - B. Give a specific example of and explain a centripetal force that affects the viability of any of the states shown on the map above.
 - C. With reference to a different specific example, explain a centrifugal force that affects the viability of any of the states shown on the map above.

STOP

END OF EXAM

AP Human Geography

2006

APPENDIX - ANSWERS

Matching multiple-choice answers and free-response scoring follow.

Original numbering runs to 75; item 62 was explicitly removed and not scored by the source. The 74 supplied MCQs have matching source answers.

Chapter III: Answers to the 2006 AP Human Geography Exam

■ Section I: Multiple Choice

- Section I Answer Key and Percent Answering Correctly
- Analyzing Your Students' Performance on the Multiple-Choice Section
- Diagnostic Guide for the 2006 AP Human Geography Exam

■ Section II: Free Response

- Comments from the Chief Reader
- Scoring Guidelines, Sample Student Responses, and Commentary
 - Question 1
 - Question 2
 - Question 3

Section I: Multiple Choice

Listed below are the correct answers to the multiple-choice questions, the percent of AP students who answered each question correctly by AP grade, and the total percent answering correctly.

Section I Answer Key and Percent Answering Correctly

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
1	B	96	92	87	80	65	83
2	C	98	95	92	88	73	88
3	A	83	75	67	60	48	65
4	E	98	95	91	84	58	83
5	D	80	73	67	57	41	62
6	E	50	33	23	15	8	24
7	A	75	61	54	44	30	51
8	A	69	51	38	29	24	41
9	D	67	62	63	61	48	59
10	E	89	84	79	71	49	73
11	B	95	89	82	72	52	76
12	C	87	78	68	62	46	67
13	D	89	79	71	63	46	68
14	B	46	37	32	28	23	32
15	C	83	72	55	38	25	52
16	E	92	88	82	77	60	78
17	A	93	86	77	63	42	70
18	A	95	89	84	73	53	77
19	C	93	89	83	77	60	79
20	D	94	87	76	65	43	71
21	A	88	71	56	40	28	54
22	B	88	77	63	50	31	59
23	C	89	79	68	59	42	65
24	D	79	68	60	51	34	57
25	B	86	81	75	64	53	70

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
26	A	79	72	65	57	43	62
27	C	85	76	69	58	40	64
28	E	64	51	42	33	19	40
29	D	97	93	88	80	57	81
30	D	83	69	59	50	36	58
31	C	67	56	45	39	26	45
32	A	98	93	86	77	54	80
33	C	59	55	51	48	40	50
34	D	70	55	47	37	22	44
35	E	70	56	47	41	36	49
36	B	87	72	62	47	33	58
37	C	92	79	66	51	33	62
38	A	80	74	70	64	47	65
39	A	51	42	39	31	22	36
40	B	89	78	64	49	29	59
41	B	43	34	30	28	25	31
42	A	84	66	49	35	18	48
43	E	60	36	24	17	12	28
44	A	83	72	64	58	45	63
45	A	91	82	73	65	50	71
46	B	82	74	66	59	40	62
47	C	38	33	33	32	32	33
48	D	93	85	74	61	32	68
49	D	92	82	69	53	30	63
50	A	56	44	35	26	15	34

continued on the next page

Section I Answer Key and Percent Answering Correctly (continued)

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
51	A	71	52	39	28	19	40
52	A	64	55	47	40	26	45
53	C	75	62	48	39	29	49
54	E	72	53	39	28	20	40
55	C	76	57	43	32	21	44
56	B	55	36	26	22	19	30
57	E	42	30	24	21	17	26
58	B	81	65	55	45	31	54
59	D	80	61	47	36	21	47
60	D	81	68	55	43	25	52
61	A	53	43	37	29	19	35
62*	-	-	-	-	-	-	-

* Although 75 multiple-choice items were administered in Section I, Item # 62 was not used in scoring.

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
63	B	96	90	80	68	38	72
64	A	34	32	31	28	17	28
65	A	95	88	75	62	33	68
66	E	61	54	47	40	25	44
67	B	74	58	47	36	25	46
68	C	86	78	74	71	56	72
69	D	58	41	27	20	12	30
70	A	72	56	38	25	15	39
71	C	44	28	22	17	13	24
72	D	87	74	65	53	40	62
73	C	59	46	35	30	24	38
74	C	37	21	15	11	9	18
75	B	64	51	42	34	25	42

Analyzing Your Students' Performance on the Multiple-Choice Section

If you give your students the 2006 exam for practice, you may want to analyze their results to find overall strengths and weaknesses in their understanding of AP Human Geography. The following diagnostic worksheet will help you do this. You are permitted to photocopy and distribute it to your students for completion.

1. In each category, students should insert a check mark for each correct answer.

2. Add together the total number of correct answers for each category.
3. To compare the student's number of correct answers for each category with the average number correct for that category, copy the number of correct answers to the "Number Correct" table at the end of the Diagnostic Guide.

In addition, under each item, the percent of AP students who answered correctly is shown, so students can analyze their performance on individual items. This information will be helpful in deciding how students should plan their study time.

Scoring Guidelines for Question 1

Part A (3 points)

Define each of the following principles.

Principle	Definition
Core-Periphery	<ul style="list-style-type: none">■ Uneven spatial distribution of economic, political, or cultural power.■ Must show basic understanding of the relationship between more-developed and less-developed regions of the world.
Distance Decay	<ul style="list-style-type: none">■ Decreased spatial interaction linked to increased distance.■ Decreased influence or intensity of cultural traits and processes with increased distance.
Chain Migration	<ul style="list-style-type: none">■ Once migration starts subsequent migrants will follow earlier migrants.

Part B (6 points)

For each principle in part (A) select a migration stream identified by letter on the map and discuss how the stream you choose illustrates the principle. Note: Each lettered migration stream may be used only once.

Discussion

1 point: Must specifically identify regions or the groups of people involved in the migration, correctly linked to the principle defined in part (A).

2 points: Discuss specific reason for the migration pattern.

Core-Periphery	<ul style="list-style-type: none">■ A discussion that shows an understanding of the characteristics of the migration stream relative to the core-periphery principle.
Distance Decay	<ul style="list-style-type: none">■ Greater number of migrants settled at the edge of the country closer to the country of origin, compared to the number settled on the opposite edge of the country.■ The diminishing evidence of cultural traits by a group of people, if the explanation clearly shows a link to the fact that due to migration there is less contact between the migrants and their home country.■ Explanatory factor behind distance decay relationship (e.g., travel cost, information availability).
Chain Migration	<ul style="list-style-type: none">■ Examples must clearly establish a link/transfer of knowledge between the first group of migrants and subsequent groups OR it should be clear that subsequent migrants are from areas of close proximity to the source area of the early migrants, and that they are migrating to the same destination area.

Scoring Guidelines for Question 2

Part A (2 points: 1 point for each correct reason)

Identify two reasons why businesses would choose to locate their call centers in small southern towns.

- Low wage structure
- Low tax structure, tax incentives
- Low land (site costs) or rent
- Low building costs/buildings available
- Large labor pool (from deindustrialization) and small town/rural area
- Telecommunications in place or easily provided
- Business climate, e.g., right to work, zoning

Part B (6 points: For each of 3 examples—1 point for Core Idea; 1 point for Discussion)

Discuss three disadvantages in the use of call centers as a local economic developmental strategy.

Core Idea(s)	Discussion Points
Low wages	Adds little to local economy through disposable income
Footloose; short term; unstable employer	Corporate mobility facilitated by globalization of language, communications, technology, and minimal local investment Few local resources needs or demands Future technological advances Not a long-term contributor to local economic development
Low multiplier effect Low spin-off development	Not a provider of goods, so a minimal need for associated services, supplies, or local linkages
Amount of labor required is minimal	Small addition of capital to local economy—highly automated
Skill level requirements minimal Part-time employment	Jobs requiring basic in-house training Upward mobility/promotions restricted Limited improvements on education system Limited employment benefits
Global corporation	Separation from parent company headquarters does not encourage loyalty to locality Low investment requirements Longevity in the place depends on corporate success, succession of owners

Scoring Guidelines for Question 3

Part A (2 points)

Define the concepts "centripetal force" and "centrifugal force."

- 1 point: Generalized definition of centripetal and centrifugal without explicit reference to "viability of a state" OR one correct definition.
- 2 points: Centripetal forces unify a state (provide stability, strengthen, bind together, create solidarity).
Centrifugal forces divide a state (lead to balkanization/devolution, disrupt internal order, destabilize, weaken).

Part B (2 points: 1 point for generalized identification of a force with a country specified; 2 points for identification of a force with country specified and specific details)

Give a specific example of and explain a centripetal force that affects the viability of any of the states shown on the map.

Centripetal force examples	Specific details
Religion	Hinduism in India or Nepal; Islam in Pakistan or Bangladesh; Buddhism in Bhutan
Language	Urdu (official language), Punjabi or English in Pakistan; Hindi or English in India; Bengali in Bangladesh
Expressions of national pride/symbols (generalized: anthem, sports teams, flag...)	Cricket in India; Place name changes in India
Transportation/Communication infrastructure	Railroads in India
Raison d'être/Shared history	History of British imperialism; Creation of states (India, Pakistan, Bangladesh)
External threat	India, Pakistan
Morphology/Compact state	Sri Lanka, Bhutan
Charismatic or strong leader	Absolute monarchy in Nepal; Military leader in Pakistan
Forward capital	Capital of Pakistan moved from Karachi to Islamabad
Disaster response	Earthquake in Pakistan; Cyclones or flooding in Bangladesh; Tsunami in India/Sri Lanka—must reference unifying effect on population
Economic-development programs	Self-sufficiency program in India
Physical geography	Pakistan as a river valley, isolated by mountains and desert
Government	India's representative democracy

Part C (2 points: 1 point for generalized identification of a force with a country specified; 2 points for identification of a force with country specified and specific details)

With reference to a different specific example, explain a centrifugal force that affects the viability of any of the states shown on the map.

Centrifugal force examples	Specific details
Religion	Islam/Hindu in India or Bangladesh; Buddhist/Hindu in Sri Lanka; Sunni/Shiite Muslims in Pakistan; Islam/Hindu in Kashmir; Sikhs/Hindu in India; Jains/Hindu in India
Language	India 14–18 official languages (4 language families); disputes regarding place name changes in India
Federal Government/Regionalism	Federal system (28 states) in India
Ethnicities/Separatist movements	Sikhs in India; Muslims in Kashmir; Tamil/Sinhalese in Sri Lanka; Maoist rebels in Nepal
Morphology/Fragmented or Prorupt	Bangladesh exclave in India; Prorupt portion of India
External threat	India, Pakistan
Territorial Disputes	Kashmir dispute between Pakistan and India
Multicore state	Several large cities in India
Physical geography	Mountains divide communities in Nepal

WILL NOT ACCEPT:

- Examples with countries not on the map (e.g., Afghanistan, Burma, Madagascar)
- Same force and country for both B and C (MAY use same country with different forces or same force with different countries)