

PRACTICE EXAM 1

Section I

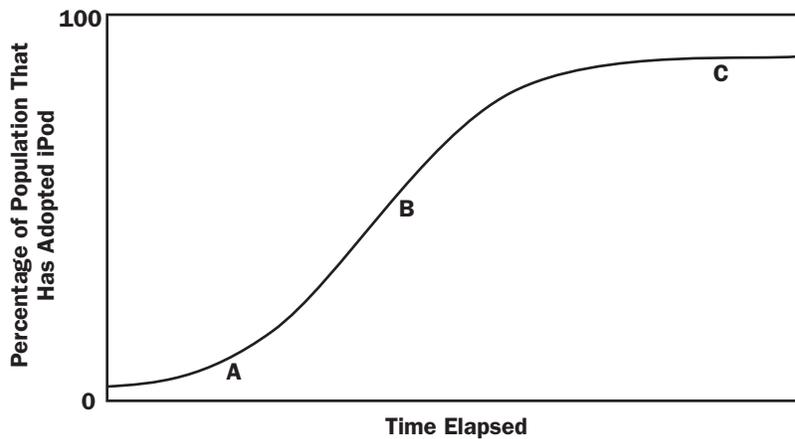
TIME: 60 minutes
75 multiple-choice questions

(Answer sheets appear in the back of this book.)

Directions: Each of the following questions is followed by five suggested answers or completions. Select the best answer choice.

- All the following have been considered new industrial countries EXCEPT
 - Hong Kong
 - South Korea
 - Brazil
 - China
 - Indonesia
- Which of the following is an example of a quinary-sector economic activity?
 - Working at a cash register at McDonald's
 - Serving as a researcher for human genetic cloning
 - Serving on the U.S. president's cabinet
 - Converting crude oil into gasoline
 - Plowing land in preparation for planting a crop
- London has become a world city in part because of its proximity to ports and other places that foster development. This reason for London's historic growth relates to the city's
 - site
 - sovereignty
 - redlining
 - situation
 - distance decay
- Which of the following is a valid difference between the urban patterns of the United States and those of Latin America?
 - Unlike U.S. cities, Latin American cities have ghettos.
 - U.S. cities follow a sector pattern, whereas Latin American cities follow concentric zones.
 - Gentrification is more present in Latin American cities.
 - Latin American cities have more-defined industrial sectors.
 - Unlike U.S. cities, Latin American cities show patterns of wealthy residents emanating from the city's central business district.
- The number of people under the age of 15 plus the number of people above the age of 64 divided by the number of the people aged 15 through 64 is defined as

Adoption of the iPod in New York City



14. Which of the following most likely explains the diffusion pattern of the iPod depicted in the graph above?
- (A) In the innovation stage, at point A, only a small number of iPod purchases were made, but by point B the number of adopters had grown exponentially as the early buyers spread the word of the iPod.
 - (B) The highest exponential growth rate was achieved by point C, where the fastest adoption of the iPod occurred.
 - (C) The highest adoption rate occurred at point A because, as a new invention, the iPod aroused excitement.
 - (D) Point C represents the late-adopter stage, when adoption of the iPod reached all people in the population.
 - (E) The pattern represents relocation diffusion.
15. All the following are true of truck farming EXCEPT:
- (A) Among the most common truck crops are tomatoes, strawberries, and lettuce.
 - (B) Most often it is characterized by the use of mechanized farming tools.
 - (C) Labor costs are often relatively high on these large-scale farming operations.
 - (D) It is the predominant agricultural practice found in the southeastern United States.
 - (E) Truck farmers' harvests are usually intended for distant markets.
16. Which of the following places is least influenced by conflicts related to multilingualism?
- (A) Nigeria
 - (B) Venezuela
 - (C) Quebec
 - (D) Cyprus
 - (E) Belgium
17. Which of the following was the first prerequisite for the start of urbanization?
- (A) Formal political organization
 - (B) Agricultural surplus
 - (C) Monarchical control
 - (D) Privatization of land ownership
 - (E) Development of currency
18. Which of the following regions is most threatened by desertification?
- (A) South America
 - (D) Africa

- (B) Australia
- (E) Asia
- (C) Europe

19. Which of the following significantly weakened the strength of Mackinder's geopolitical heartland theory?
- (A) Ascendance of the United States' international influence after World War II
 - (B) Existence of a pivot area
 - (C) Growth of Soviet power in eastern Europe
 - (D) Influence of Eurasia in world affairs
 - (E) Rise of Nazi Germany
20. Which of the following factors had the greatest effect in proving the demographic theorist Thomas Malthus incorrect?
- (A) Decreased land supply after the Industrial Revolution
 - (B) Improved fertilizers and crop strains
 - (C) Increased contraceptive technology in the Western Hemisphere
 - (D) The decline of the Roman Catholic Church's influence on politics in Britain
 - (E) Improved trade routes enabling improved food transport and cross-national trade
21. Country X can produce televisions at 50 percent of the cost that Country Y can produce televisions. Country Y can produce pencils at 70 percent of the cost that Country X can produce pencils. Therefore, Country X chooses to produce televisions and trade them with Country Y for pencils. This scenario best reflects which concept?
- (A) Substitution principle
 - (B) Topocide
 - (C) Foreign direct investment
 - (D) Footloose industry
 - (E) Comparative advantage
22. A banking company wanted to open a new branch in the New York City area. In order to study the region, the bank used a map to analyze potential locations. The map the bank's leadership used in its decision-making process showed a layer of regional data displaying per capita income; another layer displaying the frequency of bank deposits made; and another layer showing the average value of the deposited amount. With this map, the banking company was able to choose the optimum location for its new branch. All of the following are tools that the bank (or its geographic team) most likely used to create and display this layered map of geographic data EXCEPT
- (A) GPS
 - (D) desalination
 - (B) GIS
 - (E) satellite imagery
 - (C) remote sensing



23. A pilgrim to the religious site depicted in the photograph above would most likely be a(n)
- (A) Taoist
 - (B) Buddhist
 - (C) Eastern Orthodox Christian
 - (D) Muslim
 - (E) Hindu
24. In the 1980s the demographic trend in China was best characterized by a(n)
- (A) rapidly rising crude birth rate
 - (B) falling life expectancy
 - (C) decreasing general fertility rate
 - (D) increased total fertility rate
 - (E) surge in refugees emigrating from China
25. The United Nations Human Development Index is based on the assumption that a country's development
- (A) is directly related to its position in the core or periphery
 - (B) is a function of social, demographic, and economic factors
 - (C) can improve if countries liberalize trade policies
 - (D) is indicated most accurately by its gross domestic product
 - (E) is a reflection of its population count



26. The photograph above shows a farm most likely located in which of the following regions?
- (A) Sub-Saharan Africa (D) North Africa
(B) Southwest Asia (E) Southeast Asia
(C) Eastern Europe
27. All the following resulted from the British enclosure movement in the 1850s EXCEPT
- (A) agricultural efficiency increased
(B) urban migration increased
(C) feudal village life was disrupted
(D) the number of farm owners rose dramatically
(E) communal fields were consolidated
28. In 1998 an estimated 350,000 asylum seekers were from Croatia. What were their primary destinations in that year?
- (A) Kosovo and Albania
(B) Germany and France
(C) Yugoslavia and Bosnia-Herzegovina
(D) Austria and Hungary
(E) Macedonia and Romania
29. On which of the following map projections is direction true everywhere on the map?
- (A) Mollweide (D) Robinson
(B) Mercator (E) Miller cylindrical
(C) Peter
30. Which among the following has the highest-threshold, highest-range central place function?
- (A) Doughnut shop (D) Neurosurgery complex
(B) Post office (E) Department store
(C) Movie theatre

31. "Women are inherently better preservationists of Earth because women have traditionally been nurturers and men have been destroyers." This argument exemplifies
- (A) economic determinism
 - (B) the Gender Empowerment Measure
 - (C) ecofeminism
 - (D) the convergence hypothesis
 - (E) ethnogenesis
32. You would most expect to find a linguistic refuge area in a(n)
- (A) relatively flat country
 - (B) mountainous area
 - (C) international airport
 - (D) river bank
 - (E) marketplace
33. By 2015 life expectancy in several African countries, such as Namibia, is expected to decline by more than 10 years. What is the principal factor causing this demographic projection?
- (A) Cyclical poverty
 - (B) Crop shortage
 - (C) Ecoterrorism
 - (D) Infrastructural decay
 - (E) HIV/AIDS
34. Both Ulaanbaatar in Mongolia and Lagos in Nigeria are examples of
- (A) primate cities
 - (B) world cities
 - (C) exclaves
 - (D) edge cities
 - (E) postindustrial cities
35. A coffee shop and an ice-cream shop are often found on the same block, in close proximity. This is an example of
- (A) deglomeration
 - (B) agglomeration
 - (C) an export-processing zone
 - (D) purchasing-power parity
 - (E) an urban heat island
36. The size of an urban place's *hinterland* is an indication of its
- (A) government structure
 - (B) religious diversity
 - (C) social distance
 - (D) degree of centrality
 - (E) urban design



37. Which of the following is the most accurate title for the map above?
- (A) Map of World Democratic Voters
 - (B) Map of Nuclear Power Reactors
 - (C) Map of Dravidian Languages Spoken
 - (D) Map of Avian Flu Outbreaks
 - (E) Map of HIV-1 Infections
38. The informal sector in a developing country exists for all the following reasons EXCEPT:
- (A) Tertiary economies in the formal sector are not developed well enough to absorb all the economies of the informal sector.
 - (B) The demand for informal-sector goods and services keeps prices low.
 - (C) Informal-sector workers and businesses cannot afford permanent business sites.
 - (D) The government benefits from taxing informal-sector workers and their small businesses.
 - (E) The quality of products and the quality of work in the informal sector are low.
39. Two unrelated people are trying to decide whether to travel to Houston, Texas, from their homes in Germany for a special vacation package offered on television. One German decides Houston is too far away, while the other decides to purchase the vacation package. This scenario best demonstrates the effects of
- (A) brain drain
 - (B) concentration
 - (C) cognitive distance
 - (D) doubling time
 - (E) expansion diffusion

Net population added per year (in millions)	80	87	83	79	76	76	75	72
Annual population growth rate (%)	1.8	1.8	1.6	1.4	1.2	1.2	1.1	1.0

44. The table on the previous page best illustrates which demographic trend?

- (A) Hidden momentum
- (B) North-south gap
- (C) Counterurbanization
- (D) Doubling time
- (E) Zero population growth



45. Based on the population density map of China above, in which region is extensive subsistence agriculture most heavily practiced?

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

46. In 1990 Iraq invaded Kuwait, in part over an oil resource that Iraq and Kuwait both claimed fell within their national boundaries. This type of boundary dispute is classified as
- (A) locational (D) operational
 (B) definitional (E) subsequent
 (C) allocational
47. A computer production process involves creating the computer chip in Indonesia and assembling the motherboard in Malaysia. This is, most closely, evidence of
- (A) maquiladora districts
 (B) the post-Fordist production process
 (C) an infrastructure
 (D) the new international division of labor
 (E) a cottage industry
48. Which of the following asserts that ethnic minorities often live in the geographically peripheral regions excluded from the core of a country's power?
- (A) Demographic transition model
 (B) Cleavage model
 (C) Von Thünen's model
 (D) Central place theory
 (E) Locational interdependence model
49. In von Thünen's theory, the key variable in an agricultural location decision is
- (A) labor cost
 (B) value of agglomeration benefits
 (C) climate type
 (D) cost of irrigation
 (E) transportation cost
50. Currently, the world's *third*-largest religion, in terms of number of adherents, is
- (A) Sikhism (D) Christianity
 (B) Hinduism (E) Judaism
 (C) Islam

Female Literacy Rates, 2007

	Region A	Region B	Region C
Females Literate in Region (%)	53	73	88

51. Which of the following accurately lists in order the regions in the above table corresponding to A, B, C, respectively?

- (A) Asia, Latin America and the Caribbean, sub-Saharan Africa
 - (B) Latin America and the Caribbean, Asia, sub-Saharan Africa
 - (C) Asia, sub-Saharan Africa, Latin America and the Caribbean
 - (D) sub-Saharan Africa, Asia, Latin America and the Caribbean
 - (E) sub-Saharan Africa, Latin America and the Caribbean, Asia
52. Which of the following cities best represents a forward capital?
- (A) Paris, France
 - (B) Algiers, Algeria
 - (C) Putrajaya, Malaysia
 - (D) Canberra, Australia
 - (E) Warsaw, Poland
53. Which of the following best describes shifting cultivation?
- (A) Primarily a subsistence practice, it involves a farmer using a plot and then abandoning it for return at a later time.
 - (B) Usually a commercial agriculture endeavor, it involves rotating one crop type on a plot for another in a sequential pattern.
 - (C) It is the movement of pastoral nomads from one food source to another.
 - (D) Only used in wetlands, it is the use of pyramid-style farms for rice farming.
 - (E) It involves the intensive, commercial integration of crops and livestock into a farming system.
54. Which of the four stages in the demographic transition model are considered “homeostatic” stages, when the forces of demographic change are in equilibrium?
- (A) Stages 1 and 3
 - (B) Stages 2 and 3
 - (C) Stages 1 and 4
 - (D) Stage 4
 - (E) Stages 1, 2, 3, and 4
55. An essential difference between the standard language of a people and an official language is that the standard language is
- (A) the chosen, generally accepted variant of a language, while the official language is the legally declared language of a country to be used in all government interactions
 - (B) usually spoken by outsiders, while the official language is what is on all official documents
 - (C) the form spoken by commoners, while the official language is the “king’s form” of the language, taught in the grammar books
 - (D) used widely throughout society, while the official language is only used for government documents
 - (E) unchanging, while the official language changes with changes in governments
56. Which of the following most accurately matches the country to its territorial shape?
- (A) Russia: fragmented
 - (B) Poland: compact
 - (C) Singapore: perforated
 - (D) Philippines: elongated
 - (E) Chile: protruded
57. Where would you most likely find the greatest concentration of feedlots in America?
- (A) Chicago
 - (B) California
 - (C) Florida
 - (D) South Dakota
 - (E) Kentucky

58. The seasonal migration of animal livestock from lowland pastures to mountainous regions is termed
- (A) intensive subsistence agriculture
 - (B) mixed crop and livestock farming
 - (C) double cropping
 - (D) transhumance
 - (E) swidden agriculture
59. Which of the following strategies was identified by the 2004 United Nations International Conference on Population and Development as the most powerful approach for reducing the global population growth rate?
- (A) Increasing the amount of exports to less-developed countries
 - (B) Retracting anticontraception laws throughout conservative countries
 - (C) Reducing hunger throughout the world
 - (D) Empowering the socioeconomic status of women in less-developed countries
 - (E) Enforcing demographic growth rate targets in specific countries through coalition building
60. Which of the following is a true statement about popular culture?
- (A) Technology is reducing the scale of territory covered by popular culture.
 - (B) The scale of territory covered by folk culture is often much larger than that of popular culture.
 - (C) The heart of popular culture customs is often found in less-developed regions.
 - (D) Folk culture is often the result of cultural isolation, while popular culture often results from cultural diffusion.
 - (E) Popular culture customs remain the same for long periods of time.
61. In Rostow's economic development model, the stage in which workers become more skilled and modern technology spreads to industries beyond the innovating "takeoff" industry is called the
- (A) traditional society
 - (B) preconditions for takeoff
 - (C) takeoff
 - (D) drive to maturity
 - (E) age of high mass consumption

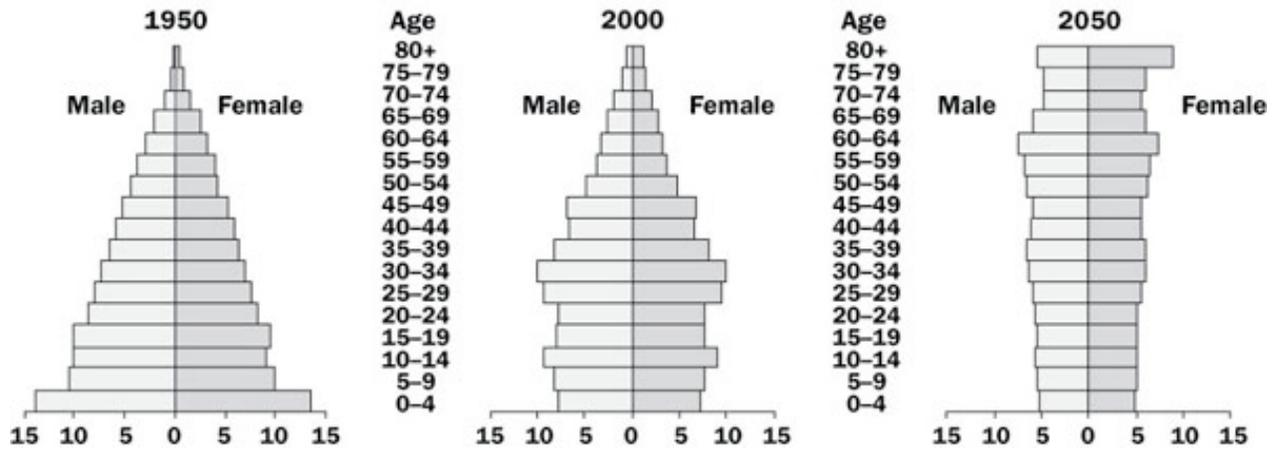
67. The relationship among power structures, the environment, and economic inequalities is termed
- (A) ecoterrorism
 - (B) political ecology
 - (C) cultural diffusion
 - (D) gerrymandering
 - (E) balkanization
68. The focus of the Green Revolution was
- (A) improving crop yields in commercial agribusiness corporations
 - (B) reducing starvation in less-developed countries
 - (C) inventing new forms of food to add variety to the human diet
 - (D) saving undeveloped land from urban sprawl
 - (E) encouraging the use of fertilizers less damaging to the environment
69. All the following are factors motivating the conflict surrounding Quebec, Canada, EXCEPT
- (A) language
 - (B) sovereignty
 - (C) religion
 - (D) economic inequality
 - (E) colonial roots
70. Which of the following countries produces the most woven cotton fabric?
- (A) Italy
 - (B) India
 - (C) China
 - (D) Egypt
 - (E) United States



71. The picture above shows an abandoned factory warehouse that was remodeled into a loft apartment complex near the central business district of a major U.S. city. This is an example of
- (A) an edge city
 - (B) commodification
 - (C) counterurbanization
 - (D) blockbusting
 - (E) gentrification

72. A primary differentiation between a state and a nation is that a state is a
- (A) political abstract, whereas a nation is a human group
 - (B) mutable concept, whereas a nation is permanent
 - (C) fixed geographic item, whereas a nation is not linked to a territory
 - (D) product of history, whereas a nation is a product of people
 - (E) controversial issue, whereas a nation is more peaceful
73. Structural adjustment programs often encourage all the following EXCEPT
- (A) selling off public resources to private corporations
 - (B) higher taxation rates
 - (C) closing of export-processing zones
 - (D) reducing government expenditures
 - (E) charging citizens more for government services
74. Which of the following would have the steepest bid-rent curve?
- (A) Textile factory
 - (B) Family desiring a plot of land for a suburban home
 - (C) Urban real estate brokerage firm
 - (D) Pig farmer
 - (E) Trash dump
75. When a barge stops in Louisville, unloads its cargo, and transfers it onto a train to be transported to Ohio, Louisville is referred to as a(n)
- (A) trading bloc
 - (B) export-processing zone
 - (C) shatter belt
 - (D) break of bulk
 - (E) special economic zone
1. Through the years, geographers have developed various perspectives on cultural ecology.
- (A) Define *cultural ecology*.
 - (B) Contrast environmental determinism and possibilism.
 - (C) Compare and contrast the spatial distribution of the cities of Chongqing and San Francisco, as shown in the maps below.
 - (D) How would the theory of possibilism explain the human constructions shown in the map of San Francisco?
- 2.
- (A) Define *demographic dependency ratio*.
 - (B) Look at the population pyramids below. Describe and explain the demographic trends in fertility and longevity depicted in China from 1950 through 2050 and relate those trends to China's dependency ratio.
 - (C) With reference to the demographic trends you identified in part B, forecast any social and/or economic problems facing China related to its dependency ratio.

China's Age Distribution
Population Structures by Age and Sex
Millions



3. Urbanization is affecting nearly all parts of the world.
- (A) Define *urbanization*.
- (B) Describe and explain the current trends in levels and rates of urbanization in two of the following regions:
- North America
 - Southeast Asia
 - Latin America
- (C) Explain counterurbanization. Explain the demographic trends linked to current patterns in counterurbanization in the United States.

1. (E)
2. (C)
3. (D)
4. (E)
5. (C)
6. (D)
7. (C)
8. (D)
9. (A)
10. (A)
11. (B)
12. (A)
13. (A)
14. (A)
15. (C)
16. (B)
17. (B)
18. (B)

19. (A)
20. (B)
21. (E)
22. (D)
23. (E)
24. (C)
25. (B)
26. (C)
27. (D)
28. (C)
29. (B)
30. (D)
31. (C)
32. (B)
33. (E)
34. (A)
35. (B)
36. (D)
37. (B)
38. (D)
39. (C)
40. (E)
41. (D)
42. (A)
43. (E)
44. (A)
45. (E)
46. (C)
47. (D)
48. (B)
49. (E)
50. (B)
51. (D)
52. (C)
53. (A)
54. (C)
55. (A)
56. (B)
57. (D)
58. (D)

- 59. (D)
- 60. (D)
- 61. (D)
- 62. (A)
- 63. (B)
- 64. (E)
- 65. (D)
- 66. (B)
- 67. (B)
- 68. (B)
- 69. (C)
- 70. (C)
- 71. (E)
- 72. (A)
- 73. (C)
- 74. (C)
- 75. (D)

Geography: Its Nature and Perspectives

Item #	3	8	10	22	29	39
Correct/Incorrect						

Population

Item #	5	11	14	20	24	33	40	44	51	54	59	63	64
Correct/Incorrect													

Cultural Patterns and Processes

Item #	9	16	23	32	43	50	55	60	65	69
Correct/Incorrect										

Political Organization of Space

Item #	6	19	28	37	41	42	46	48	52	56	67	72
Correct/Incorrect												

Agricultural and Rural Land Use

Item #	2	13	15	18	26	45	49	53	57	58	68
Correct/Incorrect											

Industrialization and Economic Development

Item #	1	7	12	21	25	35	47	61	62	70	73	75
Correct/Incorrect												

Cities and Urban Land Use

Item #	4	17	27	30	31	34	36	38	66	71	74
Correct/Incorrect											

1. **(E)**

A new industrial country has a strong manufacturing base that enables it to maintain a competitive presence in the global economy rather than remaining a neocolonial country dependent on its former colonial masters. Indonesia is primarily attracting foreign direct investment from transnational corporations, which is a form of neocolonialism. (A) and (B) are part of the Asian Tigers, a group of Asian countries that developed a strong technology manufacturing base that propelled them into a competitive and relatively independent global economic position rather than remaining economically dependent on their former colonial masters.

2. **(C)**

Serving on the president's cabinet is a quinary-sector economic activity because it involves decisions at the highest level of the government and economy. (A) is a tertiary-sector economic activity because it is service related. (B) is a quaternary-sector economic activity because it involves higher education; jobs in the quaternary sector can also be in financing, technological services, governmental operations, and the media. (D) is an example of a secondary-sector economic activity, which involve converting or processing raw materials (in this case, crude oil) that have been extracted

from the earth (which is a primary economic activity) into a product (in this case, gas) to be sold at the marketplace. (E) is an example of a primary-sector economic activity because it involves extracting natural resources.

3. **(D)**

Situation describes a place's location relative to other places, whereas (A) is the physical character of a place. (B) describes a place's ability to control its own territory and internal affairs, (C) is a discriminatory practice used by banks and lending agencies, and (E) is the decreasing impact a phenomenon has on something as the distance from its origin increases.

4. **(E)**

In Latin American (and western European) cities, the wealthy cluster nearer the central business districts and push outward from the focal point of the city, whereas in the United States the wealthy often live in suburbs outside the central cities. (A) is incorrect because many U.S. cities have ghettos. (B) is incorrect because many Latin American cities also show sector and concentric patterns. (C) is incorrect because U.S. cities show an equal (if not greater) influence of gentrifiers compared with Latin American cities. (D) is incorrect because U.S. cities have industrial sectors that are as defined as those found in Latin American cities.

5. **(C)**

The dependency ratio is a measure of the economically dependent members of the population—people considered either too old or too young to work. (A) is the maximum population that could be supported by a region's resources. (B) is the sector of the economy engaged in direct extraction of natural resources from the earth, such as farmers. (D) is a tool demographers use to illustrate trends in population by gender and age group. (E) is the "backbone of a society," including schools, health care institutions, and transportation systems.

6. **(D)**

Governments ruled by religious authorities are termed theocracies. The Afghani Taliban and the Ayatollah in Iran were religious authorities, both Muslim, who governed their countries. (A) describes countries without coasts on open seas. (B) describes countries with a representative body comprised of officials elected at the national level. (C) describes governments wherein the country is divided into districts, each with a sense of protected sovereignty (like the states in the United States) and a national government that represents those subunits. (E) are states that are so small in their territory that they are usually only a dot on the map, such as Singapore.

7. **(C)**

The six original countries in the 1958 European Community, which was renamed the European Union (EU), were Belgium, France, West Germany, Italy, Luxembourg, and the Netherlands. By 1973 Ireland, Denmark, and the United Kingdom joined. The EU has effectively improved the economy of western Europe and has made it highly competitive in the world market.

8. **(D)**

Space-time compression is defined as the decreasing effect of distance on the speed of human travel across space, in movement of people and communications. (A) is the decreasing impact a phenomenon has on something as the distance from its origin increases. (B) refers to the negative impact of globalization in causing a growing divide between countries in the periphery and those in the core. (C) is diffusion of an innovation that takes a newer form in the new place to match cultural customs. (E) is a measurement of the way a feature is arranged in space.

9. **(A)**

Amritsar, India, is the city wherein the Sikh's holiest religious site, the Golden Temple, is found. (B) is practiced mainly in Japan and involves the worship of natural elements like rivers, rocks, and mountains. The rest of India is primarily Hindu (E), although minority pockets of Buddhists (C), Christians (D), and Muslims as well as other religious minorities are present.

10. **(A)**

A functional region consists of a node and the places linked to that central point through some sort of movement. In this case the region is created by the movement of United Trucking's services to customers in the places within the boundaries shown in the diagram. (B) describes a place with a uniform trait, such as language, present throughout the

area. (C), (D), and (E) describe regions like the Bible Belt or the South in the United States—regions with boundaries marked by people’s ideas rather than overtly measurable characteristics.

11. **(B)**

While the crude birth rate reflects varying human decisions related to cultural expectations and requirements, the crude death rate reflects the spread of basic health care throughout the world. Because minimal health care has diffused even to places with very high birth rates, death rates do not display the particularly vast discrepancies among countries that birth rates do, thus invalidating (A), (C), (D), and (E). Further, (C) is illogical in that birth rates do not always offset death rates.

12. **(A)**

Transnational corporations (TNCs, also called multinational corporations) are firms that have different parts of their production processes in different countries. Export-processing zones (EPZs) are special zones, often in less-developed countries, where industrial parks and export-oriented production occurs. Often countries establishing EPZs will grant those regions special tax exemptions to lure foreign direct investment. Typically a TNC contracts with factories to use their low-cost, low-skilled labor to make lightweight products for export to distant markets. (B) is incorrect because a TNC usually establishes its world headquarters in a world city, not in an EPZ. (C) is incorrect because quaternary-sector workers are involved in high-level information processing and decision making, not in industrial assembly; their work is usually found in world cities. (D) is incorrect because technopoles are regions in which technological research and innovation is abundant, for example, Silicon Valley in California. (E) would most be attracted to places with high amounts of capital, such as world cities and global investment capitals.

13. **(A)**

The second agricultural revolution, which occurred at the end of the 19th century, saw improved farming and storage practices that allowed for increased farming efficiency and output to feed the growing urban populations forming to fuel the Industrial Revolution’s hunger for city-based workers. (B) refers to the advent of the third agricultural revolution in the 20th century, whereas (C) refers to preindustrial farming practices that colored much of medieval (feudal) times. (D) describes the opposite of what was happening at the time, because improved sanitation and inoculations helped prolong human life and improve health. (E) is also untrue because migrants moved into core countries for industrial work.

14. **(A)**

The graph depicts a typical spatial diffusion S curve. In the innovation stage (point A) the phenomenon (the iPod) is invented and first used by the innovating class of users, usually a small group. Once the innovation hits the greater community and becomes popular, it enters the majority-adopter stage (point B) with the fastest rate of adoption, as indicated by the slope of the graph. Once the innovation saturates the marketplace, or adopter class, the adoption rate (slope of the curve) lowers and the diffusion pattern reaches the late-adopter stage, when the innovation is adopted by the laggards or latecomers. (B) is incorrect because the highest growth rate occurs in the majority-adopter stage, not the late-adopter stage. (C) is not correct because in the innovator stage, the adoption rate is low, not high. (D) wrongly claims that the iPod had reached the whole population, but the y-axis of the graph indicates a saturation below 100 percent. (E) is incorrect because it is not possible to determine whether the diffusion represented in the graph was relocation or contagious diffusion.

15. **(C)**

Truck farming refers to commercial farming of fruits and vegetables intended for sale in places where such harvests are not possible (E). The market is now dominated by large agribusiness farms that grow tomatoes, strawberries, and lettuce (A), among other fruits and vegetable crops. These often corporate-owned and operated farms employ the use of machinery to irrigate and process the crops (B). Southeastern U.S. states like Florida dominate truck farming (D), along with California and Texas. (C) is false because migrant workers often supply less-expensive labor on large-scale truck farms.

16. **(B)**

Nigeria (A) has hundreds of local languages, which is one of the centrifugal forces challenging its unity. A major factor influencing the conflict over control of Quebec (C) is the division between French- and English-speaking Canadians, because Quebec is where most French-speaking Canadians are clustered. The political conflict in Cyprus (D) is highly related to the division between Greek speakers and Turkish speakers on the small island. Belgium (E) is highly divided along linguistic lines because the Flemings, the French-speaking Belgians, and the Walloons, the Dutch-speaking

Belgians, are in conflict over control of Belgium. By contrast, Venezuela (B) is considered by many to be as near to monolingual as a country can get in today's society. Spanish is spoken by a high percentage of Venezuela's population.

17. **(B)**

The development of food surpluses, or more food than farmers need, allowed a population of nonfarmers to exist. Those nonfarmers could specialize in the fields and conduct the services needed for the development of cities, which were fed by the farmers. After the development of agricultural surpluses, people could perform nonfarming jobs, including those related to politics, and formal political organizations could develop (A). (C) and (D) existed before urbanization. (E) was primarily an outgrowth of the social stratification that occurred as trade grew between farmers and nonfarmers.

18. **(B)**

Desertification is the spread of desert-like conditions into more arable regions as a result of human overuse and, perhaps, environmental shifts. According to de Blij and Murphy's research, South America (A) is at a 20 percent risk; Europe (C), 9 percent; Africa (D), 57 percent; and Asia (E), 37 percent; by contrast, Australia (B) is at an 83 percent risk.

19. **(A)**

The growth of the United States' influence after World War II beyond that of the Soviet Union most significantly challenged Mackinder's theory that dominance of Eurasia would yield world domination for a superpower, because the United States existed outside the Eurasian "world island" that Mackinder defined. (B) was the area of focus of Mackinder's theory, the area of eastern Europe and much of Russia that was considered prime real estate for world domination and that the Soviets dominated after World War II. (D) was the heart of Mackinder's heartland theory. (E) is related to Mackinder's theory because Hitler supposedly subscribed to it. (C) was largely predicted by Mackinder's theory.

20. **(B)**

Thomas Malthus lived in England during the late 18th century, when cities were growing explosively as a result of the Industrial Revolution. As urban migration hit a new high mark, Malthus was convinced that the food supply would only grow arithmetically and would not match the exponential growth of the human population "explosion." What Malthus could not see was the Green Revolution on the horizon, when the development of new farming technologies, such as improved fertilizer and crop hybrids, allowed the food supply to grow faster and provide more nourishment for the exponentially growing population. Although (E) may seem reasonable, it was improved farming technologies, not trade routes, that directly proved Malthus's ideas false. If anything, reduced land supply (A) would have supported Malthus's alarmist theory. (C) and (D) are not directly related to Malthus's theory of food production being outpaced by population growth.

21. **(E)**

Comparative advantage is the idea that a region (or country) will produce goods it can make at a lower cost than other regions can and will trade them for goods that other regions can make more efficiently than it can. In this case Country X is better at making televisions, whereas Country Y specializes in pencil production. The two countries will find greatest economic efficiency if each one produces what it has a comparative advantage in producing, and then they trade with each other. (A) relates to industrial location theory—for example, when a company chooses to outsource its factory work and substitute higher transportation costs in exchange for the lower labor costs it will have. (B) is the planned destruction of a place to make way for an industrial center. (C) is the investment of foreign companies in countries outside their headquarters, such as when an American company builds a factory in Indonesia. (D) is a type of industry that does not have high transportation costs and is therefore free to locate wherever it wants; an example is a computer chip manufacturing plant whose final product is extremely lightweight.

22. **(D)**

Desalination (D) refers to the technology used to convert salt-water into potable, drinking water. GPS (A) refers to the global positioning system that activates satellites to pinpoint locations and gather geographic data. GIS (B) refers to geographic information systems that collect, store, and analyze geographic data in the form of layered map displays. Remote Sensing (C) is the process of collecting geographic information from remote locations, most often through satellite collection systems. Satellite imagery (E) is often used to create layers in maps.

23. **(E)**

The temple in the image, with its many statues of gods and goddesses, is most likely a Hindu temple. Another defining feature of a Hindu temple is its peaceful integration into the landscape. Hindu temples are built to house shrines of deities rather than for worship. (A) Taoist temples are usually filled with bright colors, especially red, with broad, curving rooftops and sculptures of traditional deities like the dragon and the carp. (B) Buddhists often decorate their temple complexes with pagoda towers, which are usually tall, with many tiers and slanted roofs. (C) Typically, Eastern Orthodox Christian churches are ornate, with domes and pointed arches. (D) Muslims construct mosques that usually include a central worship building with four towers used to call worshippers to prayer.

24. (C)

Whereas the Communist leader Mao Zedong implemented an aggressively pronatalist campaign to raise the birth rate in China, his successor, Deng Xiaoping, realized that high birth rates could destroy China's infrastructure. Thus he imposed a strict one-child policy, which rapidly reduced the Chinese birth rate. As a result, the number of children born per 1,000 women (the general fertility rate) decreased rather than increased (A). Life expectancy (B) was not directly affected. The total fertility rate was forcibly reduced to one child per family in many areas, making (D) invalid. (E) is not a documented claim.

25. (B)

The United Nations (UN) measures countries' development with its Human Development Index (HDI), ranking countries up to 1.0, or 100 percent. The equation for the index includes social, demographic, and economic factors, such as literacy rate and amount of education, life expectancy, and gross domestic product. (A) relates to core periphery models. (C) is one side of the economic globalization debate. (D) captures too narrowly the meaning of HDI, because the intent of the UN equation was to broaden analysis of development beyond gross domestic product. (E) is not a factor in the HDI equation because the size of a population is not the sole determinant of the level of human development.

26. (C)

The photograph shows large-scale, extensive grain farming, most likely mechanized. This is highly common in places like North America and eastern Europe, especially Ukraine (called the breadbasket of Russia). (A) is dominated by primitive subsistence agricultural and livestock production. (B) and (D) are known for their desert-like terrains and nomadic herding agriculture. (E) is dominated by intensive, primitive subsistence agriculture.

27. (D)

The enclosure movement closed in the public field system and consolidated individual strips of land that jutted off feudal villages, forming one large farmstead owned by one or a few farm owners (E). This effectively reduced the number of individual farm owners, making (D) false. Efficiency rose because one owner could push best practice and reduce the chaos that characterized land organization before the enclosure movement (A). People who were pushed off their lands moved into the cities, where they could find work in the growing industrial complexes (B). Thus the number of feudal village communities fell because people lost their lands to the enclosure movement (C).

28. (C)

By 1998 the Croats living in Croatia had successfully found independence from their Serb occupiers governing from Belgrade, Serbia. Remember, Croats are a unique nationality, Serbs are a unique nationality, and the Muslims throughout the region are considered a nationality as well. However, following the Croatian victory, many of the ethnic Serbs living in Croatia did not want to be governed by the Croats, who had formed a new government. Therefore, nearly 400,000 ethnic Serbs fled Croatia for their "homeland" of Yugoslavia and Bosnia. Soon thereafter Yugoslavia devolved even further into Serbia-Montenegro, and the dictator Slobodan Milosevic was removed from power by his own people.

29. (B)

The Mercator projection, while drastically distorting the dimensions of higher-latitude land masses, accurately displays direction everywhere on the map, making it particularly useful to navigators on sea vessels. (A) is considered an equal-area projection, which accurately depicts the relative sizes of land masses while distorting the other properties of maps: shape, direction, and distance. (C) is also an equal-area map. (D) is considered an average projection in that it distorts all four properties so as not to drastically distort one. While (E) avoids the relative-size distortions of the Mercator projection, direction is only accurate along the equator.

30. (D)

In Christaller's central place theory, a high-threshold function requires a large population to make the economic endeavor work; a high-range function draws people from far away to purchase the good or use the service. (D) requires a large population, because a small percentage of people need brain surgery, so it has a high threshold; it has a high range because people would probably travel far for life-saving brain surgery. (A) and (B) are low range and low threshold, whereas (C) and (E) are a bit higher but not as high as (D).

31. (C)

Ecofeminism expresses the idea in the quote and is a new facet of study in cultural ecology. (A) is the notion that human behavior and development is dictated by economic factors and causes. (B) is a measurement tool available to geographers to compare the abilities of men and women to excel in economic and political leadership and work. (D) argues that cultures are becoming more similar as regional disparity is being reduced through improved transportation and communication. (E) is the process of all cultures originating somewhere, somehow.

32. (B)

A linguistic refuge area is a place that is relatively free from forces of language diffusion and convergence. Mountainous regions such as the Alps, the Himalayas, and the Caucasus Mountains often divide groups geographically and allow for isolation and refuge from invading forces trying to assimilate a people to a particular culture or language. Mountains often provide this geographical separation, preventing language convergence that requires constant contact with other languages or forced change. A marketplace (E), like an international airport (C), is a place where contact with other languages is likely to occur in trade and thus would not allow for linguistic refuge or shelter from convergence. (A) provides little geographic protection for the forces of diffusion and convergence. (D) is also unlikely to include a linguistic refuge area because riverbanks are often invasion points and centers of cultural contact.

33. (E)

Life expectancy in African countries such as Namibia and South Africa is being critically reduced by HIV/AIDS, in some cases by as much as 10 years. While (A) has a cumulative effect that keeps life expectancy low, it is not immediately reducing life expectancy as HIV/AIDS is, although some people argue that cyclical poverty is related to HIV/AIDS in Africa. (Remember, the AP test requires you to select the *best* answer, and cyclical poverty is not as exact as HIV/AIDS.) (C) is the term for the violent terrorist actions taken by environmental activists against organizations linked to ecologically destructive practices.

34. (A)

A primate city is a large urban center that is disproportionately representative of its national economic, political, and social power. Often a primate city is found in a developing country where former colonizers set up their colonial headquarters. Both Ulaanbaatar and Lagos are much larger than the next largest cities in their countries and are disproportionately powerful. (B) are economically powerful global "headquarters" cities that generally have populations greater than 10 million people. (C) are portions of a country's territory separated from its main body by the territory of another country. (D) are clusters of new urban settings with varied functions that often exist off highway exits and beltways surrounding central business districts of older downtown regions. (E) are cities in which the dominant economic activities are no longer secondary but have transitioned toward tertiary, quaternary, and quinary sectors. Ulaanbaatar and Lagos are both still in their industrializing phases.

35. (B)

Agglomeration is best exemplified in the modern shopping mall, wherein stores are clumped to take advantage of like-minded shoppers who may walk out of one store and be attracted to another. Coffee shops and ice cream shops tend to clump on blocks with the marketing strategy that customers may leave the coffee shop and want ice cream, or may decide against ice cream for coffee or mochas, or vice versa. (A) is the "unclumping" or spreading out of formerly clustered industries that occurs when staying together becomes too expensive or cramped. (C) is a region set up to lure factories, such as maquiladoras. (D) is an equation used to compare the value of a good in two countries; for example, the Big Mac index compares the price of a Big Mac in two places. (E) is the phenomenon of the temperature being somewhat higher in an urban area as a result of industrialization and increased human population density.

36. (D)

An urban place's hinterland is defined as the surrounding area serviced by the functions in an urban center; the larger the urban place, the larger is its hinterland (usually). Thus, as you move "up" a country's urban hierarchy, the economic

reach (or hinterland) of each urban place increases in size. (A), (B), and (E) might be tempting answers, but (D) is a much more concrete, logical relationship to the hinterland concept. (C) has no relationship to the concept.

37. **(B)**

This map was created by the International Nuclear Safety Center in 2005 to show the clustered spread of nuclear power throughout the world. Notice that nuclear power is positively correlated with GDP. (A) is incorrect because there are dots in China and not enough throughout India. (C) is incorrect because Dravidian is more widely spoken in India than is indicated on the map, and Dravidian is uncommon in western Europe and the United States. (D) is incorrect because western Europe and the United States had proportionately fewer outbreaks than in China. (E) is incorrect because HIV should be more represented on the map in Africa and less in the United States and western Europe, proportionately, than indicated.

38. **(D)**

The informal sector consists of workers who do not report their incomes or jobs to the government. The government cannot tax informal-sector workers because it does not know officially of their work activities, and the informal sector is not included in GDP calculations.

39. **(C)**

Cognitive distance shapes the effects of friction of distance because a person's perception of distance impacts their travel decision. (A) is massive emigration of educated elites, (B) is a measurement of a phenomenon's spread over space, (D) is the time needed for a population to double in size, and (E) is the spread of a phenomenon from one place to another with the continued addition of adopters along the way.

40. **(E)**

Hierarchical diffusion is the spread of something from large or powerful places to areas that are smaller or less powerful. Reverse hierarchical diffusion is the inverse of that; it is the spread of something from smaller (or less-powerful) places to larger (or more powerful) places. The map shows its spread from A to B to C, each with a larger population of chickens than the other, thus moving from smaller to larger populations. (B) is the diffusion of the basic idea or principle but the failure for the entire concept to spread (e.g., the spread of the idea of a hamburger to India, where it was adopted as a vegetarian burger). (C) is the spread and adoption of a culture trait that does not seem to be appropriate for the adopting population, such as ranch-house architecture in snowy climate regions. (D) is unrelated but describes the gap in development in places, often between more-developed countries and less-developed countries.

41. **(D)**

Centrifugal forces are those that either pull people away from the city's center or pull a state (e.g., a country) toward falling apart and dividing into separate states. (D) can cause people who are being oppressed to become so frustrated that they will try to secede or at least revolt against discrimination by others. (A), (B), (C), and (E) are all centripetal forces, which help bind a state together or pull people toward a city's center. A national flag usually inspires loyalty and unification around a national identity, as does a state-owned news station, which can spin news in favor of the state's power. A national research laboratory could be seen as a centripetal force because of its findings of new health initiatives, but it would not be a centrifugal force in usual scenarios. A common language also binds people together into more of a cohesive whole.

42. **(A)**

Linguistically and religiously divided, Nigeria is nearly split along a north-south axis, with its northern states conforming to Islamic Sharia law and its southern states aligning along Christian lines, thus making (C) and (D) incorrect. Hausa is the dominant language in the north, while Yoruba and Ibo dominate the southern region, making (E) incorrect. (B) is a political, supranational organization similar to the European Union in its aim of uniting African countries in working toward progress.

43. **(E)**

Languages in the Indo-European family are spoken by more of the world's people than any other family, though Chinese, in the Sino-Tibetan family, has the largest number of speakers of any single language. (A), (B), (C), and (D) are all Indo-European languages. Turkish is in the Altaic family, which dominates the Anatolian Plateau region.

44. **(A)**

According to the table, the growth rate declines steadily beginning in 2000. However, between 2015 and 2020, 72 million people will be added to the global population annually. This is a trend called hidden momentum, which is the continuous growth in population despite a growth rate decrease. This occurs because the size of the generation of women having babies is very large as a result of the high fertility rates in the preceding generations. Their mothers and grandmothers had lots of babies. (B) is the divide in development levels that roughly corresponds to the equator, where most of the world's global south population lives in poverty. (C) is the pattern of human migration away from cities into villages and towns. (D) is the amount of time it would take for a population to double in size. (E) is the point at which the natural growth rate equals zero, which is not when no babies are born but is the point when, generally, the birth rate equals the death rate.

45. (E)

Extensive agriculture involves farming practices requiring large plots of land, such as wheat farming or animal herding. Intensive agriculture is farming a small plot of land more heavily, as in rice farming. As you move eastward into China's capital interior, intensive subsistence farming increases, and more people live near water-rich, arable lands close to Beijing and Shanghai (regions A, B, and C). Nomadic herding, the movement of animals to find food sources, is an example of extensive subsistence agriculture, most likely to occur in Region E.

46. (C)

Allocational boundary disputes involve the distribution of a precious commodity or resource, such as oil. (A) are disputes over the location of a boundary, whereas (B) are arguments over the language in the boundary's definition—for example, the exact height of a boundary's expanse. (D) are fights over the nature of a boundary—for example, how a boundary will be enforced. (E) is a type of border, not a type of border dispute.

47. (D)

The new international division of labor is a production process involving outsourcing of some parts of an assembly line to other countries. When one part of a computer is made in one country and another in a different country and final assembly takes place in yet another country, the labor has been divided among three countries. This process is facilitated by improved transportation links and time-space compression, or the reduction of the friction of distance. (A) are production or factory districts in Mexico on the U.S. border where American factories are built to take advantage of Mexico's low-cost labor, usually provided by women. (B) is the new factory production process that contrasts with the original assembly-line process developed by Henry Ford, in which a worker performed one piece of the assembly line process all day. In the post-Fordist assembly line, workers are trained to complete several tasks as a group to increase efficiency. (C) is the "backbone" of a country or region composed of various operations that enable a place to function; examples include the water system, roads, and the electrical grid. (E) refers to manufacturing of goods in homes rather than in factories; this was found in England and the United States before the Industrial Revolution and is often found in less-developed countries that have not yet industrialized.

48. (B)

The cleavage model was developed as an explanatory factor in electoral patterns. These patterns often show the power core being dominated by a particular nation (or cultural group) and in tension with minority groups, which are often marginalized politically and geographically. (A) explains and predicts the changes in population patterns in countries, (C) explains and predicts patterns of agricultural land use, and (D) explains and predicts the patterns of city development and their relationship to urban hierarchy. (E) was developed by Harold Hotelling to study the placement of industries in relationship to each other and their markets.

49. (E)

The key variable in von Thünen's theory is distance to the marketplace from the harvest site as measured by the transportation cost. He concluded that zones of similar agricultural land use will develop around a central marketplace in relation to the intensity of the farming being done and the cost of transporting the harvest to the market.

50. (B)

With nearly 1.5 billion adherents, Christianity is the world's largest, followed by Islam, with 1.2 billion, and then Hinduism, with 757 million. Sikhism, with nearly 22 million believers, is larger than Judaism, with 17 million.

51. (D)

Nearly all men and women can read in more-developed countries. Literacy rates for females vary significantly in less-developed regions. In general, more men than women are literate, a pattern true throughout history. However, this gap is lessening in many places throughout the world, though literacy rates continue to be especially divergent between males and females in Arab states, where only 50 percent of females are literate but nearly 75 percent of men are literate. This question requires general knowledge of demographic trends, very accessible through the Population Reference Bureau (www.prb.org). Of the three regions, sub-Saharan Africa has historically had lower literacy rates in general, particularly among women, largely because of that region's earlier stage in the demographic transition. This would eliminate (A), (B), and (C), leaving the correct answer choice dependent on the rates of Latin America and the Caribbean and Asia.

52. (C)

A country creates a forward capital when it moves its capital city to a new site to achieve some national aim, such as moving the power base to a more central location. The Malaysian government is currently moving its headquarters from the colonial capital city of Kuala Lumpur to the forward capital of Putrajaya, a move intended to demonstrate the country's economic modernity.

53. (A)

Shifting cultivation is primarily associated with subsistence farming, although it is also used by commercial farming systems. It is essentially farming a plot of land and then shifting to another plot to allow the fertility of the soil in the farmed plot to regenerate. (B) is incorrect because shifting cultivation is primarily a subsistence practice. Further, the rotation of crop types in a pattern on the same piece of land is known as crop rotation, not shifting cultivation. (C) describes pastoral nomadism; (D) is intensive subsistence terrace farming often found in China; and (E) describes mixed farming, a technique often found in Europe and North America.

54. (C)

Stage 1 is characterized by high crude birth and death rates, leading to equilibrium and nearly a natural rate of increase of nearly zero, which is equilibrium. Stage 2 is when the crude death rate begins to fall as a result of technological improvements in health care, causing the rate of natural increase to rise from its zero position in stage 1. Once a country reaches stage 3 in its demographic transition, the crude birth rate falls toward the death rate, and they finally meet again in stage 4, when the "forces of change," birth rate and death rate, are again equal, or at equilibrium.

55. (A)

An official language is the designated language of a government for all government purposes, such as legislation and all records. The standard language is the generally accepted dialect in a language that has various forms. For example, the standard language in the United States is American English, whereas in England, it is British Received Pronunciation. (B) is untrue because the standard language is what is generally spoken by the "insiders" of a population and can be used as a culturally divisive moment when newcomers try to integrate into a region and speak a different dialect. (C) is incorrect because it simply describes what is generally known as the standard language. (D) is untrue because the official language of a country can be (and often is) the standard form of the language. Standard languages can change, with invasion or governmental change, making (E) false.

56. (B)

In a compact-shaped country the distance from the center of the country to any of its extremities (or points on its boundaries) is about equal. Russia (A) is more of an elongated shape, Singapore (C) is a compact shape, the Philippines (D) is fragmented, and Chile (E) is elongated.

57. (D)

The greatest concentration of cattle feedlots, where cattle are fattened in a mechanized, factory-like process, exists in a corridor from South Dakota to Texas. Feedlots are also found in large numbers in Washington, Utah, Idaho, and Arizona. Some feedlots can hold more than 1 million head of cattle.

58. (D)

Transhumance is the practice of pastoral nomads when they circulate with their herds from lowland pastures to mountainous regions in a learned pattern that is often passed down through generations of family members. (A) involves farming one small plot of land to yield high output per acre. (B) is the integration of livestock and crops on one plot of land. (C) is an intensive farming practice using one plot of land to produce two harvests each year. (E) involves clearing

unfarmed land by first cutting and then burning the present vegetation, allowing the cleared land to rest for a period, and then planting crops.

59. **(D)**

The 2004 UN conference related increasing women's rights to lowering birth rates, because women can enter the workforce and find opportunities outside the home. Additionally, increased women's rights lead to better health care for women because women can push for reforms in health care and research that focus on their needs. One of the effects of better maternal health care is a lower infant mortality rate. When babies live longer, parents do not have to have more babies to fill their family needs. (E) may seem like a reasonable answer, but enforcing target goals in specific countries was an approach taken by earlier conferences that did not emphasize enough the significance of the structural change necessary to change birth rates, which are an expression of cultural decisions.

60. **(D)**

Folk and popular culture are the two primary divisions of material culture, which comprises the aspects of culture that can be seen or are tangible. Nonmaterial culture, on the other hand, comprises the intangible aspects of a culture, such as beliefs. Folk culture represents homogeneity, or sameness, and is usually practiced by those who live in isolated regions, free from the influence of popular culture's diffusion. Popular culture diffuses over wide areas of diverse peoples, while folk culture defines a much smaller group of more-homogenous people, thereby making (B) incorrect. The Internet and television have increased the speed and expanse of popular culture's diffusion, because new ideas can reach farther places faster, thus making (A) incorrect. Popular culture is often spread from the most-developed regions of the world—regions with the capital resources to induce the diffusion—thus (C) is incorrect. Because of the rapid diffusion of popular culture, the actual customs rapidly change from place to place, as new ideas quickly come and adapt to the new people's needs, thus making (E) incorrect.

61. **(D)**

In the drive to maturity stage of Rostow's model of economic growth, the innovation and growth that benefited the society's takeoff industry spread to other areas of the economy, enabling workers to specialize and grow more skilled. During (A) a large number of people in the society are farmers. (B) involves the identification of and initial investment in the infrastructure needed for an industry to take off. (C) is the stage in which the selected industry grows and prospers. By (E) the economy has developed to the extent that consumer goods, such as cars and radios, are produced for consumption by a wealthier workforce.

62. **(A)**

Maquiladoras are U.S.-owned factories built at any point along the U.S.–Mexico border, such as point A. These factories are built because the maquiladora regions offer companies low-cost labor and other tax breaks. The North American Free Trade Agreement (NAFTA) is highly related to the growth of maquiladoras. The maquiladora regions are also considered export-processing zones.

63. **(B)**

Chain migration is when migrants move to a location because of information from friends or relatives who have made the same migration previously. (A) is when people are pushed from their home regions against their will (e.g., to escape ethnic cleansing) and become refugees (E). (C) is the migration of people within their country or region, and (D) is the movement of people in similar patterns over time, such as traveling from a boarding school to home for the summer holiday.

64. **(E)**

This is the definition of the general fertility rate. (A) is the number of children each woman is expected to bear. (B) is the ability of a woman to conceive. (C) is the number of children born per 1,000 people (not just women) in a given year. (D) is the number of deaths among infants under one year of age per 1,000 live births in a given year.

65. **(D)**

Mandarin, with nearly 875 million speakers, is the largest language from the Sinitic branch of the Sino-Tibetan family, followed by Wu (77 million), Cantonese (71 million), Min (55 million), and then Hakka, also known as Kejia (33 million).

66. **(B)**

An edge city is an urban complex that typically grows off a highway or beltway surrounding an inner city (A). Edge cities often have their own malls, health care facilities, entertainment complexes, and other necessities and conveniences (C). Often manufacturing jobs and facilities exist in edge cities, built in suburban settings (D). A cluster of office buildings on the side of a highway or beltway often forms the heart (or nucleus) of an edge city, and suburban housing and family restaurants grow around the office zone. Tenements, or slums, are not found in most edge cities but are more typical of the original inner-city regions.

67. **(B)**

Political ecology is the arm of geography that analyzes political structures and their relationship to natural resources and habitats. (A) refers to terrorist actions taken by groups frustrated with their perception of corporate abuses of natural habitats, (C) is the spread of a cultural trait across space, (D) is redefining electoral districts to give certain parties an advantage, and (E) is the fracturing of a cohesive state into splinters.

68. **(B)**

The 20th century's Green Revolution was aimed at reducing hunger in less-developed countries by giving farmers in those regions greater access to the fertilizers and seeds they needed to increase their crop yields and improve their farming practices. It did not focus on commercial agriculture or improving profits for agribusiness corporations, as (A) suggests; and it did not focus on improving the human diet (C) or land preservation (D). Although (E) may imply the use of fertilizers that aid in increasing crop yields, (B) is more related to the focus of the Green Revolution.

69. **(C)**

Religion is not a motivating factor in the conflict within Quebec. French-speaking inhabitants of Canada are known as Francophones and English-speaking inhabitants are Anglophones. Quebec was first settled by the French in the 1600s and then taken by the British in the 1700s, making (E) a factor in the conflict. The Francophones desire more control over Quebec's economic and political affairs, which have been traditionally dominated by the Anglophone minority, making (B) another factor. Quebec has traditionally been Canada's poorest province, and this inequality has created tensions that straddle cultural and economic lines, making (D) a factor. Language (A) is a preeminent factor in the dispute, with Francophones seeing their French language as a defining factor in their national identity. They have even created a commission to transfer toponyms from English names into French names.

70. **(C)**

China is the leading producer of woven cotton fabric, a labor-intensive part of the clothing and textile production process. India is second in line, followed by the United States.

71. **(E)**

Gentrification is the upgrading and remodeling of rundown buildings in low-income neighborhoods in inner-city regions. (A) is a suburban complex that has developed on the edge of an inner city, usually off a highway exit. (B) is the process of transforming something not priced into something traded as a product—for example, putting a price on a human working in a factory. (C) is the process of moving away from inner cities toward a more rural, suburban life. (D) is the illegal practice by real estate brokers of stirring up racially grounded fear in residents that leads to segregation and prompts some residents to sell their homes.

72. **(A)**

A state is essentially a country, which is a political term for a sovereign, bounded territory that has a government. A nation, on the other hand, is a group of people with a shared culture and history. A state can change its borders, and a nation can realign its identity, thus making (B) incorrect. (C) is incorrect in its assertion that a nation is not linked to a territory, because nationhood often is tied powerfully to a piece of land; and (D) is incorrect because a state and a nation are both products of history and people. (E) is flawed in its oversimplified suggestion that a nation cannot be controversial; the explosive conflict between the Serbs and Croats in the former Yugoslavia is just one example of a nation steeped in controversy.

73. **(C)**

Structural adjustment programs encourage countries to develop economies that can participate in the globalizing economic landscape through international trade. To achieve such growth, the structural adjustments often end popular, but economically inefficient, practices. This involves all the steps listed except for (C), because a structural adjustment program often leads to the creation of zones to lure foreign direct investment, which can generate growth in a country.

However, the program can be quite painful in the short run because people may lose jobs and services that were cut in favor of the “more efficient” economic solutions advocated by proponents of the structural adjustment program.

74. (C)

The highest land value in a city is usually found at the point called the peak land value intersection (PLVI), which is near the city’s central business district, or city center. The bid-rent curve shows how much a firm or person is willing to pay for land. The stronger the desire to be near the PLVI, the steeper the curve. (C) is a business that needs visibility and accessibility to downtown areas. (A), (B), (D), and (E) require larger plots of land with lower returns on their investments, so it would be illogical, not to mention costly, for them to buy the more expensive land closest to the PLVI. By contrast the real estate firm could afford the property and can expand by building up rather than out.

75. (D)

A break-of-bulk is a place where cargo (or people) change from one type of transportation to another, such as from barge to train. (A) is a group of countries that create an open trading relationship through reduced tariffs and improved transportation among their borders. (B) is a region in a less-developed country where foreign direct investment is courted through tax breaks and other incentives to companies. (C) is an unstable zone between two regions of conflicting political or cultural values. (E) is a region in a communist country (such as China) where special capitalistic trade is allowed.

Sample Response and Scoring Rubric for FRQ 1

Sample Response

A. Cultural ecology is the study of the relationship between a human cultural group and its natural environment. It is closely related to human–environment interactions.

B. Environmental determinism is a doctrine holding that human activities are controlled by the environment. Possibilism is a school of thought created in response to environmental determinism. One fundamental belief of possibilism is that humans, not the physical environment, are the primary active force. Another belief is that any environment offers a culture numerous possible ways to develop.

C. Both cities developed along elongated, hilly sites flanked on one side by water. Both are connected by bridges leading to adjacent land across the water. Both use tunnels for arterial roads. There are differences in street patterns. In Chongqing the streets are laid out to accommodate the rugged terrain. San Francisco, however, shows relatively little deviation from a gridiron pattern. Also, San Francisco covers a much larger land area.

D. San Francisco seems to have adapted the environment to fit its gridiron pattern. Possibilists would point to the innovative technologies in the bridges and tunnels that both cities built to adapt to environmental constraints. Also, possibilists would point to San Francisco’s parks and the construction of streets through them as human adaptation, molding the environment to fit its needs. Further, the city parks in San Francisco are on the coast, rather than inland.

Scoring Rubric for FRQ 1

PART A: 1 point

1 point for any of the following:

- Cultural ecology is related to the study of human–environment interactions.
- It is the study of a human group’s interaction with its environment.
- It is the study of the cultural landscape.

PART B: 2 points

1 point for any of the following:

- Environmental determinism sees the environment as directing human action, predetermining the course humans will take.
- Possibilism sees the environment as providing a set of broad constraints that limit the possibilities of human choice.

PART C: 2 points

1 point for accurate similarity; 1 point for accurate difference:

- Both cities developed along elongated, hilly sites nearly surrounded by water, both are connected by bridges leading to adjacent land across the water, and both use tunnels for arterial roads.
- The cities have different street patterns. In Chongqing the streets are laid out to accommodate rugged terrain, whereas San Francisco shows relatively little movement away from the gridiron pattern; also, San Francisco covers a much larger land area compared with Chongqing.

PART D: 2 points

1 point for each of the following:

- Possibilists would point to the innovative technology in bridges and tunnels used by the cultures to adapt to environmental constraints.
- Possibilists would point to San Francisco's parks and the construction of streets through them as indications of human adaptation, molding the environment to fit human needs.

OVERALL SCORE FOR FRQ 1 _____ / 7 points

Sample Response and Scoring Rubric for FRQ 2

Sample Response

A. The group of people in a country composed of active workers, usually aged 15 through 64, is considered nondependent. The people who are older or younger than the working group form the group considered dependent. The dependency ratio shows the relationship between the dependents and the workers (who take care of the dependents).

B. These population pyramids illustrate China's shrinking working-age, nondependent population and its growing elderly population. A sharp decline in China's fertility rate was seen starting in the 1980s with the imposition of the antinatalist one-child policy. That policy successfully reduced the number of babies each woman was having, which is the country's total fertility rate. The improvements in medical and industrial technology are increasing the life expectancy of Chinese citizens, or their longevity. This is causing China to have a higher dependency ratio, because a large number of elderly nonworkers are dependent on a shrinking number of people in the working cohort (the nondependents).

C. Because of its high dependency ratio, China is facing the problem of having too few working-age people to support its growing elderly population. As the number of older people rises, health care costs will rise rapidly and the number of working-age people able to support these rising costs will decrease. Therefore, many older people may not receive the care that they need because they cannot pay for it; they are also more likely to become homeless. Moreover, many jobs may be unfilled because the domestic workforce is not large enough to replace the positions once occupied by the retiring population. This could lead to an economic downturn.

Scoring Rubric for FRQ 2

PART A: 1 point

1 point for the following:

- The dependency ratio is the number of people considered dependent (under age 15 and above age 64) divided by the number of people in the workforce (nondependents).

PART B: 5 points

1 point for each correct description of demographic trend, 1 point for each correct explanation of demographic trend, and 1 point for correct relation of demographic trends to dependency ratio:

- Decreasing working-age, nondependent population
- Rising elderly dependent population
- Decreasing fertility linked to one-child policy
- Increasing longevity linked to improved medical technology and industrialization
- Increasing dependency ratio in China as number of dependents is rising and number of people in the workforce (aged 15 through 64) is decreasing

PART C /4 points

1 point for each correct identification of social and/or economic problem related to China’s dependency ratio:

- Higher number of dependents means higher health care costs
- Lower number of workers means fewer people to support rising health care costs
- Potential homelessness and insufficient care provided for elderly people
- Economic downturn because jobs not filled after older workers retire

OVERALL SCORE FOR FRQ 2 _____ / 10 points

Sample Response and Scoring Rubric for FRQ 3

Sample Response

A. Urbanization is generally equivalent to city building. It is the spread and growth of cities, or the transformation of rural space into urban space. Urbanization includes political, social, and cultural shifts. It is the evolution of a location into a city structure with an urban population that has migrated, usually, from rural areas to supply labor and inhabitants.

B. “Rate of urbanization” refers to how fast urbanization is growing, while “level of urbanization” refers to the amount of the population that is already considered urban. Although urbanization is increasing globally, certain areas are experiencing faster rates of urbanization because more of their space is becoming urban. Southeast Asia is experiencing rapid rates of urbanization, with many countries industrializing and converting formerly rural places into urban spaces. Southeast Asia’s level of urbanization, or the percentage of its people considered urban, is lower than North America’s level of urbanization. Simply explained, North America experienced an earlier industrial revolution, therefore it has already developed a higher level of urbanization than Southeast Asia. Since most North Americans are urban already, its rate of urbanization is lower—urbanization has nearly reached 100 percent.

C. Counterurbanization is the return of city-dwellers (or urban people) to more-rural places because of the pull factors present in more-rural landscapes, including a slower pace of life, less traffic, less pollution, and less noise, among others. It is most likely to be found in more-developed countries among retired individuals, usually older than 55 and in the middle- to upper-income ranges.

Scoring Rubric for FRQ 3

PART A: 2 points

1 point for each of the following observations (2 points maximum):

- Urbanization is the spread and growth of cities.
- It is the growth of city-based populations.
- It includes social, political, and cultural impacts as populations transform into city-based ways of living.

PART B: 4 points

1 point for each of the following correct descriptions and explanations (4 points maximum):

- North America: low rate of urbanization and high level of urbanization; already reached industrial revolution, so population is already largely urban
- Southeast Asia: high rate of urbanization and low level of urbanization (ongoing city building); currently experiencing industrialization and growth of cities, massive urban migration patterns in many countries (although not all; Singapore, for instance, is 100 percent urban)
- Latin America: low level of urbanization and high rate of urbanization; similar to Southeast Asia, with high rates of rural-to-urban migration, causing higher rates of urbanization and increasing levels of urbanization

PART C: 3 points

1 point for each of the following (3 points maximum):

- Counterurbanization is the process of a population becoming less centralized and generally moving from urban spaces into more-rural spaces.
- The factors that influence counterurbanization are higher costs of living in cities, less traffic and congestion in outlying areas, and the availability of improved transportation and communication technology (allowing commuting and working from home in more-remote areas).
- Demographically, most people in U.S. counterurbanization trends are retired (older than 55) and in the middle-to upper-income ranges, allowing them the freedom to be spatially mobile and the ability to move into the “countryside” for a more peaceful retirement than the traffic and congestion in the cities would allow.
- Younger people, in their 20s and 30s, often enjoy the bustle and diversity of the cities. Unmarried people also are statistically more likely to live in urban spaces.

OVERALL SCORE FOR FRQ 3 _____ / 9 points