AP Human Geography Practice Test 1

Multiple-Choice Section: You have 60 minutes to answer these questions.

Directions: Choose the one alternative that best completes the statement or answers the question.

1) Situation identifies a place by its
A) absolute location.
B) mathematical location on Earth's surface.
C) location relative to other places.
D) unique physical characteristics.
E) nominal location.

2) The concept that the distribution of one phenomenon is scientifically related to the location of other phenomena is
A) regional analysis.
B) spatial analysis.
C) spatial association.
D) spatial distribution.
E) relative location.

3) One important feature of the world's population with the most significant future implication is that
A) it is increasing more slowly than in the past.
B) there are more people alive in the world now than at any time in the past.
C) death rates are significantly higher than in the past.
D) people are uniformly distributed across Earth.
E) the most rapid growth is occurring in the developing world.

4) Physiological density is the number of
A) acres of farmland.
B) farmers per area of farmland.
C) people per area of land.
D) people per area suitable for agriculture.
E) people living in a given nation-state.

5) India and the United Kingdom have approximately the same arithmetic density. From this we can conclude that the two countries have the same
A) level of output per farmer.
B) number of people per area of land suitable for agriculture.
C) pressure placed by people on the land to produce food.
D) number of people per area of land.
E) all of the above
6) The medical revolution has been characterized by
A) the invention of new medical technologies.
B) diffusion of medical practices.
C) the elimination of traditional causes of death in developing countries.
D) longer life expectancies in the developing world.
E) all of the above.

7) The lowest natural increase rates are found in countries in which stage of the demographic transition?
A) Stage 1
B) Stage 2
C) Stage 3
D) Stage 4
E) Stages 1 and 2

8) The map above, which displays countries according to population size rather than land area is a
A) population cartogram.
B) Mercator projection.
C) population pyramid.
D) equal area projection.
E) Robinson projection.

9) Thomas Malthus concluded that
A) population increased geometrically while food production increased arithmetically.
B) the world's rate of population increase was higher than the development of food supplies.
C) moral restraint was producing lower crude birth rates.
D) population growth was outpacing available resources in every country.
E) both A and B.

10) Most people migrate primarily because of which type of push factor?
A) economic
B) environmental
C) political
D) religious
E) all of the above
11) The map above shows this type of migration:
A) intraurban.
B) international.
C) interregional.
D) intraregional.
E) interurban.

12) Many Asians are currently migrating to the United States through the process of
A) political asylum.
B) brain drain.
C) chain migration.
D) illegal immigration.
E) brain drain followed by chain migration.

13) Counterurbanization is
A) the move from the urban core to suburban areas.
B) largely international migration.
C) increased migration to rural areas and small towns.
D) the trend of the elderly retiring to rural locations.
E) mostly intrurban.
14) Folk cultures are spread primarily by
A) contagious diffusion.
B) remote diffusion.
C) relocation diffusion.
D) stimulus diffusion.
E) hierarchical diffusion.

15) The current distribution of soccer demonstrates that
A) a folk custom can become part of a popular culture.
B) all sports are examples of folk culture.
C) television has infused all sports into popular culture.
D) American football is also an example of a folk culture.
E) most popular cultures began as obscure folk cultures.

16) One significant impact of popular culture is to
A) create a more varied and less uniform landscape.
B) prevent the diffusion of folk culture.
C) limit access to electronic media.
D) modify the physical environment.
E) all of the above.

17) All of the following are examples of electronic media and the diffusion of popular culture except
A) TV.
B) the Internet.
C) Facebook.
D) McDonald’s.
E) Youtube.

18) A literary tradition is
A) a form of a language used for official government business.
B) a collection of sounds that a group of people understands.
C) a collection of languages related to each other.
D) the written form of a language.
E) a form of a language spoken in a particular area.

19) A group of languages that share a common ancestor before recorded history is a
A) dialect.
B) language branch.
C) language tree.
D) language group.
E) language family.

20) A creolized language is
A) extinct.
B) endangered.
C) an isolated language family.
D) a possible prehistoric super family.
E) a mix of indigenous and colonial languages.
21) With respect to the relationship between culture, religion, and the physical environment
A) some religions derive meaningful events from the physical environment.
B) religious ideas may be responsible for some of the changes people make in the physical environment.
C) religion is still an important source of identification for some distinct cultural groups.
D) the origin of most religions is associated with specific places.
E) all of the above are true.

22) A large and fundamental division within a religion is a
A) caste.
B) branch.
C) sect.
D) dialect.
E) denomination.

23) The world's largest universalizing religion is
A) Buddhism.
B) Christianity.
C) Judaism.
D) Islam.
E) Hinduism.

24) The world's largest ethnic religion is
A) Judaism.
B) Daoism.
C) Hinduism.
D) Shintoism.
E) Confucianism.

25) Elements of nationalism include all but
A) common culture.
B) shared attitudes.
C) shared emotions.
D) political structure.
E) all of the above are elements of nationalism.

26) Denmark is the best example of a nation-state because
A) nearly all Danes speak Danish and live in Denmark.
B) Denmark is part of the European Union.
C) the people living on the Faeroe islands, which are controlled by Denmark, speak Faeroese.
D) Danish and German nationalities intermingle in Schleswig-Holstein.
E) all of the above.

27) Balkanization refers to
A) the creation of nation-states in southeastern Europe.
B) a small state inhabited by many ethnic groups.
C) a small geographic area that cannot successfully be organized into states.
D) the breakdown of a state due to conflicts among nationalities.
E) ethnic cleansing.
28) A nation or nationality is
A) a group of people tied together through a common ancestor.
B) a country.
C) ethnic identity.
D) a group of people tied to a place through legal status and personal allegiance.
E) any cohesive group of people.

Ethnicities in Western Asia

29) Which of the following can be supported from the above map?
A) Armenia is primarily a homogeneous state
B) There is major conflict between Sunni and Shiite Arabs in Pakistan.
C) Most Kurds in western Asia live in northern Iran.
D) Afghanistan is primarily a homogenous state.
E) Azerbaijan is a compact state.

30) The process when a group forcibly removes another group is called
A) war.
B) apartheid.
C) racism.
D) ethnic cleansing.
E) genocide.

31) One example of a multinational state is
A) United Kingdom.
B) Taiwan.
C) Slovenia.
D) Iceland.
E) Republic of Korea.
32) An area organized into an independent political unit is a
A) colony.
B) sphere of influence.
C) state.
D) protectorate.
E) satellite.

33) The Law of the Sea recognizes ocean boundaries by
A) designating all oceans as the “high seas” with no state control allowed.
B) giving some countries exclusive control of international waters.
C) standardizing the territorial limits for most countries at 200 nautical miles.
D) standardizing the territorial limits for most countries at 12 nautical miles.
E) allowing landlocked countries to claim rights to some international waters.

34) Wasted vote, excess vote, and stacked vote gerrymandering are all examples of
A) the redrawing of political boundaries to provide more electoral equality.
B) the redrawing of legislative boundaries in most European countries.
C) methods of creating electoral districts that are still legal in the United States.
D) the redrawing of political boundaries by a bipartisan commission.
E) the redrawing of legislative boundaries to benefit the party in power.

35) A state with a large projecting extension is a
A) compact state.
B) perforated state.
C) fragmented state.
D) prorupted state.
E) elongated state.

36) The Human Development Index
A) measures the level of development of a country.
B) considers development to be a function of a decent standard of living.
C) considers development to be a function of a long and healthy life.
D) considers development to be a function of access to education.
E) all of the above.

37) An example of a primary sector activity is
A) education.
B) manufacturing.
C) mining.
D) retailing.
E) the processing of raw materials.

38) Compared to more developed countries, less developed countries typically have all but which of the following characteristics?
A) higher crude birth rates
B) lower dependency ratios
C) higher percentage of children under age 15
D) lower percentage of elderly
E) lower life expectancy
39) According to Rostow's development model, the process of development begins when
A) a high percentage of national wealth is allocated to nonproductive activities.
B) an elite group initiates innovative activities.
C) take-off industries achieve technical advances.
D) workers become more skilled and specialized.
E) the economy shifts from production of heavy industry to consumer goods.

40) In contrast to the international trade approach, the self-sufficiency approach to development
A) begins when an elite group initiates innovative activities.
B) results in uneven resource development.
C) suffers from market stagnation.
D) spreads investment through all sectors of the economy.
E) calls for a country to identify its unique economic assets.

41) Alternative energy resources that are renewable include all but which of the following
A) hydroelectric power.
B) solar energy.
C) geothermal energy.
D) nuclear power.
E) wind power.

42) The main features that distinguish commercial agriculture from subsistence agriculture include all of
the following except
A) whether the product is consumed on or off the farm.
B) whether crops are grown or animals are raised.
C) the percentage of farmers in the labor force.
D) the use of machinery.
E) farm size.

43) The form of subsistence agriculture that feeds the largest number of people in the developing world is
A) intensive subsistence.
B) shifting cultivation.
C) pastoral nomadism.
D) dairy farming.
E) plantation farming.

44) Pastoral nomadism is most commonly found in which climate region?
A) humid low-latitude
B) dry
C) warm mid-latitude
D) cold mid-latitude
E) marine west coast

45) According to von Thünen's model, a commercial farmer is most concerned with which of these costs?
A) cost of the land
B) cost of transporting output to market
C) value of yield per hectare
D) all of the above
E) A and B only
46) Unlike most other types of agriculture, plantation agriculture is
A) part of agribusiness.
B) a form of subsistence agriculture found in developed countries.
C) a form of commercial agriculture found in developing countries.
D) practiced in much of the world’s high-latitude climates.
E) usually situated in densely settled locations.

47) The Industrial Revolution
A) was geographically dispersed.
B) was a transformation that was solely industrial.
C) is a term commonly used to define a process that began in Eastern Europe.
D) was a gradual diffusion of new ideas and techniques.
E) first developed in the United States.

48) Copper production is a bulk-reducing industry because
A) the mills are near the mines.
B) the final product has a much higher value per weight.
C) refineries import most material from other countries.
D) copper ore is low-grade.
E) it involves several steps.

49) Maquiladoras
A) are factories in Mexico near the U.S. border.
B) have become more important since the North American Free Trade Agreement eliminated international trade barriers in the region.
C) take advantage of much lower labor costs in Mexico.
D) are factories built by U.S. companies.
E) All of the above are true.

50) A company that uses more than one mode of transport will often locate near
A) break-of-bulk points.
B) consumers.
C) raw material.
D) major urban areas.
E) their sources of inputs.
51) The above map of toxic chemical release sites shows
A) that most sites are located in the western United States.
B) that toxic waste in the United States is a much bigger problem today than it was 20 years ago.
C) that most sites are located in Georgia.
D) that the largest sites are in the western United States.
E) that the largest sites are mines in Ohio.

52) The Central Business District attracts services primarily because of its
A) geographical size compared to the rest of the urban land area.
B) high land costs.
C) more intensive land use.
D) construction of skyscrapers.
E) accessibility.
53) The figure above shows
A) a huge increase in business services.
B) job increases in the tertiary sector.
C) a huge decline in the secondary sector.
D) a major decline in primary sector jobs.
E) decreases in government services.

54) Rural settlements differ from urban settlements primarily according to which type of activity?
A) cultural
B) economic
C) political
D) religious
E) social
55) Historically, linear rural settlements were developed primarily because of
A) collective land ownership.
B) the need for common grazing land.
C) inheritance laws.
D) the need for access to a river or other means of communication.
E) the need for defense.

56) The most significant anticipated benefit of the enclosure movement in Great Britain was to
A) destroy traditional village life.
B) provide labor for the factory system.
C) replace abandoned villages with new farmsteads.
D) stimulate urbanization.
E) promote agricultural efficiency.

57) What is true of central place theory, shown above?
A) Larger settlements are fewer in number but closer together than smaller market areas.
B) It helps to explain how the most profitable location can be identified.
C) The competition between places creates an irregular pattern of settlements.
D) Squares are used to delineate market areas.
E) The range is the minimum distance people are willing to travel to use a service.

58) The maximum distance people are willing to travel for a service is the
A) hinterland.
B) range.
C) threshold.
D) market area.
E) friction of distance.
59) According to the gravity model, the potential use of a service at a location is related
A) directly to population and inversely to distance.
B) directly to distance and inversely to population.
C) directly to both population and distance.
D) inversely to both distance and population.
E) to none of the above.

60) If a country's largest city has 1,000,000 inhabitants and the second largest city has 200,000
inhabitants, the country follows what distribution?
A) central place theory
B) economic base
C) the primate city rule
D) the rank-size rule
E) the gravity model

61) The urban model that best accounts for the rise of edge cities in North America is the
A) peripheral model.
B) concentric zone model.
C) multiple-nuclei model.
D) sector model.
E) demographic transition model.

62) In the United States, which of the following definitions of a city covers the largest land area?
A) central business district
B) central city
C) suburban area
D) metropolitan statistical area
E) urban cluster

63) The process of change in the use of a house, from single-family owner occupancy to abandonment, is
A) blockbusting.
B) annexation.
C) gentrification.
D) redlining.
E) filtering.

64) Public transit in European cities is relatively extensive because
A) most Europeans can’t afford cars.
B) European governments subsidize public transit.
C) urban population density is lower.
D) the central city contains fewer high-rises.
E) most European cities have not suffered from an eroding tax base.

65) According to the concentric zone model, a city develops in a series of
A) corridors.
B) nodes.
C) sectors.
D) rings.
E) a combination of all of the above.
66) According to the sector model, the best housing is located in
   A) sectors throughout the urban area.
   B) an outer ring surrounding the city.
   C) nodes near universities and parks.
   D) renovated inner-city neighborhoods.
   E) a corridor from downtown to the edge of the city.

67) According to the multiple nuclei model, an airport is likely to attract nearby
   A) heavy industries.
   B) medium-class residences.
   C) shops.
   D) pizzerias and bookstores.
   E) hotels and warehouses.

68) Compared to the United States, people with social and economic problems in European cities are
   more likely to be
   A) clustered in inner-city neighborhoods.
   B) dispersed throughout the city.
   C) clustered in remote suburbs.
   D) distributed uniformly throughout the urban area.
   E) concentrated in central locations.

69) Most nonrenewable energy sources are
   A) replaced continually.
   B) generally easy to extract.
   C) relatively evenly distributed around the globe.
   D) both proven and potential reserves.
   E) readily available.

70) Urban economic and social geographic challenges in the United States include all of the following except
   A) an eroding tax base, especially in inner-cities.
   B) a bigger concentration of low-income residents in suburban areas.
   C) physical deterioration of neighborhoods as a result of filtering and redlining.
   D) the impact of recession.
   E) high rates of unemployment, crime, and substance abuse.
71) According to the above map, most of the world's largest urban settlements are in
A) developed countries.
B) East Asia, especially China and Japan.
C) developing countries.
D) Western Europe.
E) South Asia, especially India.

72) Which of the following is a true statement about the population pyramids shown above?
A) Population pyramid D shows a place that has a large percentage of elderly people.
B) Population pyramid B shows a place that has a very high percentage of people in their 20s.
C) Population pyramid A shows a place that has the largest birth rate.
D) These are all population pyramids of developed countries.
E) Life expectancy is relatively low for all these places.
73) A lingua franca is
A) a language used in trade in a country or region by people who have different native languages.
B) a dialect spoken by some African-Americans.
C) a boundary that separates regions in which different language usages predominate.
D) a regional variety of a language.
E) the dialect of English associated with upper-class Britons.

74) Critics and defenders of sustainable development both agree that
A) definitions of resources change drastically and unpredictably over time.
B) the world has only 11.4 billion hectares of biologically productive land.
C) less international cooperation is needed to reduce the gap between developed and developing countries.
D) more international cooperation is needed to reduce the gap between developed and developing countries.
E) the world will reach a population ceiling before the end of the next century.

75) Which of the following is shown by the above Gender Inequality (GII) Index map?
A) There is least inequality in Europe.
B) There is most inequality in Asia.
C) There is least inequality in Latin America.
D) The highest GII numbers are in sub-Saharan Africa.
E) Both A and D are true.

End of the multiple-choice portion of the practice test.
Free Response Questions

Directions: Answer each of the three free response questions in 75 minutes or less.

1. A. Define the three types of density used in population geography.
   B. Explain why the densities for each country seem to vary significantly.

2. A. Describe the three main types of regimes shown on the below map.
   B. What region of the world seems to have the most autocratic regimes?
   C. Discuss the role of social media in the Arab Spring.

Regime Type

3. A. Diagram the Hoyt Sector Model and Harris and Ullman's Multiple Nuclei Model.
   B. What are the major similarities and differences between the two?
   C. To what extent are these models useful in understanding American urban areas today?
Answer Key to AP Human Geography Practice Test 1

Multiple Choice Answers Explained

1. C. The other choices deal with absolute location and site.

2. C. Spatial association identifies cultural, economic, and environmental factors that display similar distributions.

3. E. More than 95% of the natural increase is clustered in developing countries. This has significant future implications.

4. D. Physiological density is the number of people per area suitable for agriculture.

5. D. Arithmetic density is total number of objects in an area, so it tells us nothing more than the number of people per area of land.

6. E. All of these statements are true.

7. D. By the time countries reach stage 4 they have very low rates of natural increase. For example, this is true of western European countries today.

8. A. See Figure 2-2 on page 45. This is a population cartogram, which displays countries by size of population rather than land area.

9. E. The statements in A and B are the two basic premises of Malthus’s prediction regarding future world population.

10. E. There are a wide variety of push factors associated with migration.

11. C. See Figure 3-17 on page 89. This map shows migration from one region to another in China. This is interregional migration.

12. E. An increasing trend with migration from Asia to the United States is brain drain followed by chain migration. This allows well-educated Asians to take advantage of the priorities set by the U.S. quota laws.

13. C. Counterurbanization, which is becoming more common in the United States, is the migration from urban areas to rural areas and small towns. It results in part from very rapid expansion of suburbs.

14. C. Unlike popular culture, folk culture is transmitted from one location to another more slowly and on a smaller scale, primarily through relocation diffusion.

15. A. Soccer originated as a folk culture in England, and has since been transformed into a part of global popular culture.

16. D. Popular culture tends to create a more uniform environment, and provides access to electronic media. It wouldn’t necessarily prevent the diffusion of folk culture, and it certainly modifies the physical environment.

17. D. All of the others are examples of electronic media and the diffusion of popular culture.
18. D. A literary tradition is the written form of a language.

19. E. A language family is a collection of languages related through a common ancestral language that existed long before recorded history.

20. E. A creolized language is one that results from the mixing of a colonizer’s language with the indigenous language of the people being dominated.

21. E. All of these statements about the relationship between culture, religion, and the physical environment are true.

22. B. Denomination and sect are terms that refer to smaller divisions within a religion.

23. B. A universalizing religion is global and seeks to appeal to all people regardless of culture or location. Christianity has more than 2 million adherents, more than any other universalizing religion.

24. C. An ethnic religion is one that is relatively geographically concentrated, and likely to be based on the physical characteristics of a particular location. Hinduism is by far and away the world’s largest ethnic religion, with more than 900 million adherents.

25. E. Nationalism is loyalty and devotion to a particular nationality, and all of these statements are legitimate elements of nationalism.

26. A. A nation-state is a state whose territory corresponds to that occupied by a particular ethnicity. Nearly 90% of the population of Denmark consists of ethnic Danes.

27. D. The word comes from the Balkans region of South Eastern Europe where there has been so much national and ethnic conflict. It is the process by which a state breaks down through conflicts among its ethnicities.

28. D. Nationality is identity with a group of people that share legal attachment and personal allegiance to a particular place as a result of being born there.

29. D. See Figure 7-34 on page 244. This is the only statement that can be supported from that map. Afghanistan is clearly a multiethnic state.

30. D. Ethnic cleansing is the forcible removable of one group by another ethnic group, and it may sometimes involve genocide.

31. A. The United Kingdom consists of England, Wales, Scotland, and Northern Ireland. The other countries listed are nation-states.

32. C. All of the other options involve some level of dependence.

33. D. The Law of the Sea was initially signed by 158 countries, and standardized the limits for most countries at 12 nautical miles.

34. E. Gerrymandering was named for Elbridge Gerry, an early nineteenth-century American politician from Massachusetts. It is the redrawing of legislative boundaries to benefit the party in power. It is illegal today.
35. D. Prorruptions are large projecting extensions of states, and are usually created to provide access to a resource, or to separate two states that otherwise would share a boundary. Namibia is a good example of a prorupted state.

36. E. All of these statements are true of the Human Development Index.

37. C. A primary sector activity is the part of the economy concerned with the direct extraction of materials from Earth’s surface, and includes agriculture, mining, fishing, and forestry.

38. B. The dependency ratio is 47% in Europe, compared to 85% in sub-Saharan Africa. All of the other statements about less developed countries are true.

39. B. According to Rostow’s development model, the process of development begins in stage 2, which he called “Preconditions for Takeoff.” At that time an elite group will initiate innovative economic activities.

40. E. In the self-sufficiency model, countries encourage domestic production of goods, and discourage opening themselves up to foreign investment and international markets.

41. D. Nuclear power is not renewable. All of the others mentioned are renewable.

42. B. Whether crops are grown or animals are raised has nothing to do with the distinction between commercial and subsistence agriculture. All of the other options are features that help to make that distinction.

43. A. Intensive subsistence agriculture tries to produce the maximum feasible yield from a parcel of land. It is the form of agriculture that feeds most people in the developing world.

44. B. Pastoral nomadism is a form of subsistence agriculture based on the herding of domesticated animals. It is adapted to dry climates, where planting crops is impossible.

45. E. According to this model, when choosing an enterprise, the farmer compares two costs: the cost of the land and the cost of transporting products to market.

46. C. Plantation agriculture is the most important form of commercial agriculture in the developing world.

47. D. The Industrial Revolution was a gradual diffusion of new ideas and techniques that began in western Europe, especially Britain, in the late 1700s.

48. B. A bulk-reducing industry in one in which the final product weighs less or comprises a lower volume than the inputs. Copper production is an especially good example of this.

49. E. All of these statements about maquildora plants are true.

50. A. Break-of-bulk points are locations where transfer is possible from one mode of transportation to another.

51. D. The map shows that the largest toxic chemical release sites in the United States are in the west, and these are mostly mines.
52. E. Accessibility attracts services to the Central Business District. None of the other options do that.

53. B. See Figure 12-6 on page 433. The tertiary sector has grown rapidly in recent years.

54. B. Urban settlements are centers for consumer and business services, whereas rural settlements are centers for agriculture and provide a small number of services.

55. D. Linear rural settlements comprise buildings clustered along a road, river, or dike to facilitate communications.

56. E. The purpose of the enclosure movement was to promote agricultural efficiency, by consolidating small landholdings into a smaller number of large farms in England during the eighteenth century.

57. B. See Figure 12-12 on page 437. Central place theory helps to explain how the most profitable location can be identified. None of the other statements are true of central place theory.

58. B. The range is the maximum distance people are willing to travel to use a service. The range is the radius of the circle (or hexagon) drawn to delineate a service’s market area.

59. A. The gravity model holds that the potential use of a service at a particular location is directly related to the number of people in a location and inversely related to the distance people must travel to reach the service.

60. C. The primate city rule is when the largest settlement in a country has more than twice as many people as the second-ranking settlement. Argentina and the Republic of Korea are examples of countries that follow this rule.

61. A. The peripheral model is a model of North American urban areas consisting of an inner city surrounded by large suburban residential and business areas (including edge cities) tied together by a beltway or ring road.

62. D. A metropolitan statistical area in the United States is an urbanized area of at least 50,000 people, the county within which the city is located, together with adjacent counties that have a functional connection to the central city.

63. E. Filtering is a process of change in the use of a house, from single-family owner occupancy to abandonment.

64. B. In major European cities extensive networks of bus, tram, and subway lines have been maintained, and government funds for new construction have been provided in recent years.

65. D. The concentric zone model is a model of the internal structure of cities in which social groups are spatially arranged in a series of rings.

66. E. According to the sector model, a city develops in a series of sectors. The best housing, according to the model, is found in a corridor extending from downtown to the outer edge of the city.

67. E. The multiple nuclei theory states that some activities are attracted to particular nodes. For example, an airport may attract hotels and warehouses.
68. C. Some European policies to help preserve the countryside from development and avoid the sprawl that characterizes American suburbs have resulted in the clustering of people with social and economic problems in high-density and remote suburbs.

69. B. Remaining supplies of nonrenewable energy, especially fossil fuels, are both proven and potential reserves. They are unevenly distributed around the globe, and increasingly difficult to extract.

70. B. In U.S. metropolitan areas, low-income residents are still largely concentrated in inner-city areas.

71. C. See Figure 12-38 on page 455. Most of the world’s largest urban settlements are in developing counties.

72. B. This is the only true statement that can be made from the population pyramids shown.

73. A. B, C, D, and E are definitions of Ebonics, Isogloss, Dialect, and British Received Pronunciation respectively.

74. D. Sustainable development is development that meets the needs of people in the present, without compromising the ability of future generations to meet their needs. It can only be effectively achieved through international cooperation.

75. E. See Figure 9-17 on page 310. The Gender Inequality Index map shows the least inequality in Europe and the most inequality in sub-Saharan Africa.

**Free Response Questions Explained:**

1. A. The three types of density used in population geography are arithmetic, physiological, and agricultural. Arithmetic density is simply the total number of people per square kilometer (or unit of land). Physiological density is the number of people who are supported by a unit of arable land. Last agricultural density is the number of farmers per unit of arable land.

B. The reason that the charts vary so much is that countries like the United States and Canada contain so much land area, that when you divide the land area with the population they have a very small arithmetic density compared to the Netherlands which has many people per unit of land because it is so small in land area. Also Egypt is mainly a desert, so it’s physiological and agricultural density are very high because it has very little arable land, so the little farmland it has must support many people. Likewise, it is still a country with little agricultural technology, so farmers are mainly subsistent farmers, so many farmers must farm small areas of arable land, compared to Canada or the United States where there is a very small agricultural density.

2. A. The different types of regimes shown on the map are autocratic, which is a country run by ruler who makes decisions based on his/her self interests, an anocracy, which is not autocratic, nor is it a democracy, but rather somewhere in between, and a democracy, where citizens vote to elect leaders and can participate in elections. All three vary according to the selection process of their next leader, the degree to which citizens may participate, and the systems of checks and balances that they may have.

B. By looking at the map, it appears that there is a high concentration of autocratic regimes in the area of North Africa and the Middle East.
C. As the Arab Spring began in 2010, the use of social media played a key role in getting information out to the world through rapid diffusion via Facebook and Twitter. The world watched as the revolutions and regime shifts took place.

3. A. See Figures 13-10 and 13-11 for diagrams of the models.

B. The Hoyt sector model has only five sectors for a city, whereas the Multiple Nuclei has nine. Each shows the CBC near a central point and both have middle-class residential next to the CBD. Low-class residential is also next to the CBD in both models. The main difference in the models is that the Multiple Nuclei has many more sectors than the Hoyt model. The Multiple Nuclei breaks down manufacturing into light versus heavy and most importantly includes suburbs, which the Hoyt model does not.

C. Both models can still be used in looking at American urban areas today. For the Hoyt Sector Model, cities still develop along transportation hubs and low income housing can be found near these areas. The Multiple Nuclei Model increasingly becomes relevant as you have suburbanization and many different "mini" CBDs seem to emerge outside of larger cities. The CBD is now no longer the focal point as it once was in the 1950s.