

1.	Which of the following examples describes the S-shaped curve according to which a population grows rapidly but eventually reaches a constant population?
a)	demographic transition
b)	replacement fertility curve
c)	logistic growth curve
d)	sustainability
e)	carrying capacity

2.	Which of the following examples describes the maximum number of a particular species that an environment can support without degrading the environment?
a)	demographic transition
b)	replacement fertility curve
c)	logistic growth curve
d)	sustainability
e)	carrying capacity

3.	Which of the following examples describes the movement of a nation from a high population growth to a low population growth?
a)	demographic transition
b)	replacement fertility curve
c)	logistic growth curve
d)	sustainability
e)	carrying capacity

4.	The figure below illustrates which of the following concepts:
a)	replacement level fertility
b)	population age structure
c)	low death rates
d)	Malthus' theory of human population
e)	logistic population growth

5.	Assume that the figure below illustrates the characteristics of a tribe on a small Pacific island. Which of the following is a plausible explanation for the shape of the graph:
a)	a devastating drought about 10 years ago
b)	the arrival of a clan from another island about 20 years ago
c)	introduction of prenatal and infant medicine about 10 years ago
d)	many of the island elderly moved to another island about 5 years ago
e)	a record crop harvest about 5 years ago

6.	A devastating tsunami on December 26,2004 killed an estimated 230,000 people. With a growth rate at just 1.2% per year, replacing the number of lives lost took:
a)	a couple of hours
b)	a couple of days
c)	a couple of weeks
d)	a couple of years
e)	this amount of people has not been replaced yet

7.	According to the concept of the "demographic transition," a population will go through a period of expansion, but later stabilize at:
a)	its original number
b)	at the maximum carrying capacity of the land

c)	at a population larger than before the transition, but with zero growth
d)	a constant rate of growth
e)	a level where deaths caused by famine and disease equal new births

8.	The doubling time of a population:
a)	is two-thirds of the tripling time
b)	is a function of exponential growth
c)	is based on a constant birth rate
d)	$\text{Growth rate} = (\# \text{ of births}) - (\# \text{ of deaths per unit time}) / (\text{total population})$
e)	refers to demographic fertility

9.	Decreased death rate and the accelerated rate of human population growth are related to:
	I. improved sanitation and health

	II. increased food supply
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	III. control of disease-spreading organisms
a)	I only
b)	II only
c)	III only
d)	I and II
e)	I, II and III

10.	The "demographic transition" refers to:
a)	declining population growth rate following rapid growth
b)	democratic mandates for contraceptives to control human population growth
c)	the maximum human population sustainable by the Earth
d)	the transition from population growth to population decline
e)	overpopulation in less developed countries

11.	As of 2001, the population of the Earth was about _____ and the annual rate of population growth was _____.
a)	1.2 billion; 3.7%
b)	6.3 billion; 1.4%
c)	8.6 million; 0.5%
d)	12.0 billion; 2.5%
e)	256 billion; 3.2%

12.	Human population growth during the pre-industrial agricultural period and during the Industrial Revolution period occurred with little change in:
a)	birth rates
b)	death rates
c)	growth rates
d)	maximum human life expectancy
e)	average life expectancy

13.	Epidemic diseases include all of the following <b>except</b> :
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a)	influenza
b)	measles
c)	cholera
d)	cancer
e)	plague

14.	In a developing country, chronic diseases account for a _____ proportion of total mortality. Acute diseases account for a _____ proportion of total mortality.
a)	large; small
b)	small; large
c)	large; large
d)	small; small
e)	in developing countries, population is controlled by <i>food supply</i> , not disease

15.	Rapid human population growth puts an especially heavy burden on:
a)	the environment
b)	the wildlife
c)	sewage treatment plants
d)	the ocean
e)	rapid human population growth burdens all of these

16.	In primitive countries, breast feeding slows population growth because:
a)	it increases the average number of years between births
b)	it is healthy and decreases infant mortality
c)	it keeps the children from being hungry
d)	it increases the age at which women will bear their first child
e)	it decreases the frequency of sexual activity

17.	Human demography suggests that an improving economy in a country correlates with:
a)	decreased birth rate, increased population growth rate
b)	decreased death rate, increased population growth rate
c)	decreased birth rate, decreased population growth rate
d)	increased birth rate, decreased population growth rate
e)	increased birth rate, increased population growth rate

18.	Which of the following gives an example of an acute and a chronic disease:
a)	measles and cholera
b)	influenza and heart disease
c)	stroke and measles
d)	cancer and stroke
e)	plague and tooth decay

19.	Which of the following parameters is/are necessary to describe exponential population growth?
a)	carrying capacity
b)	population size
c)	juvenile death rate
d)	time lag
e)	all of these

20.	The demographic transition occurs in three stages. Under which circumstance is a nation <u>unable</u> to make the transition from stage II to stage III:
a)	when value is put on small families

b)	when parents don't see the benefit from having few but well educated children
c)	when medical advances are used to decrease the death rate
d)	when abundant food provides plenty of resources to survive
e)	none of these

21.	How rapidly a population changes depends most upon (select the best answer):
a)	birth rates
b)	death rates
c)	growth rates
d)	maximum lifetime
e)	life expectancy

22.	The crude growth rate is defined as:
a)	birth rate minus death rate
b)	maximum life time minus average life expectancy
c)	crude birth rate minus crude death rate
d)	birth rate plus death rate
e)	maximum growth rate that can be accommodated

23.	The basic concepts of population growth and change are known as:
a)	human demography
b)	human dynamics
c)	total fertility
d)	demographic transition
e)	population dynamics

24.	The "demographic transition" leads to:
a)	an increase in population growth rate
b)	an decline in population growth rate
c)	an increase in the birth rate
d)	a decline in the death rate
e)	all of these; it is a four-stage pattern of population growth
Ans: b Difficulty: Easy Link to: 4.5	

25.	The simplest and one of the least controversial means of slowing population growth is:
a)	abortion
b)	birth control
c)	delaying first childbearing
d)	no sexual activity before marriage
e)	sterilization

26.	In Thomas Malthus' theory of human population, the ultimate fate of humankind is said to be:
a)	a technological utopia
b)	a return to rural, agrarian society
c)	plague, pestilence, and famine
d)	a crowded Earth, population in a delicate balance with food supply
e)	urban society, with all food supplied by industrial processes ("hydroponics") or by fully-automated agriculture

27.	Calculate the doubling time of the population in Kellertopia. The annual population growth in this fictional country is 5.0 %.
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a)	14 month
b)	140 month
c)	1.4 years
d)	14 years
e)	7 years

28.	The growth rate of the human population has increased over the last few hundred years due to all of the following reasons <b>except</b> :
a)	the maximum age to which individuals can live has increased
b)	the birth rate has increased
c)	juvenile death rates have declined
d)	the death rate decreased
e)	the age of first childbirth has increased

29.	The current population of Demographica Island is 10 million inhabitants, and the population is doubling every 10 years. Current agriculture on Demographica could feed 20 million people, and technological improvement is expanding that capacity by 1 million every year. Given only this information, when will there be a food shortage on the island?
a)	never
b)	in 10 years
c)	in 15 years
d)	in 20 years
e)	in 25 years

30.	In June 2001, 17,800,000 people inhabited Demographica Island. During the time period from 2000 to 2001, 301,000 births were recorded. During the same period of time 120,000 deaths occurred. Calculate the growth rate (in %) for Demographica Island.
a)	0.001 %
b)	0.01 %
c)	1.0 %
d)	10.0 %
e)	10.1 %

31.	Examine the graph below illustrating the age distribution of people in a tribe in the Amazon basin. What might be the significance, from a demographic standpoint, of this distribution for the future of this population?
a)	the population is growing toward the maximum human population sustainable by the basin
b)	the total population size is increasing exponentially and they will therefore run out of resources
c)	the population is growing logistically and is balanced with its resources
d)	the population has type I survivorship curve.
e)	the population is not replacing itself and the group may disappear

32.	<i>The current population of Demographica Island is 10 million inhabitants, and the population is doubling every 10 years. Current agriculture on Demographica could feed 20 million people, and technological improvement is expanding that capacity by 1 million every year. Given only this information, is there a problem in the future of the island? If so, when?</i>

33.	<i>The current population of Demographica Island is 10 million inhabitants, and the population is doubling every 10 years. Current agriculture on Demographica could feed 20 million people, and technological improvement is expanding that capacity by 1 million every year. If the population of Demographica Island were not doubling, but stable except for a constant rate of immigration of 1.25 million people per year, would the island face food shortages in the future? If so, when?</i>
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34.	<i>The current population of Demographica Island is 10 million inhabitants, and the population is doubling every 10 years. Current agriculture on Demographica could feed 20 million people, and technological improvement is expanding that capacity by 1 million every year. What is the maximum rate of immigration (number of people per year), assuming no other growth in population, that will never lead to any shortage of food on the island?</i>

35.	<i>The current population of Demographica Island is 10 million inhabitants, and the population is doubling every 10 years. Current agriculture on Demographica could feed 20 million people, and technological improvement is expanding that capacity by 1 million every year. What is the maximum rate of growth of the island's population (doubling time in years), assuming no immigration, that will never lead to any shortage of food on the island?</i>
Ans:	

36.	How does the total fertility rate (TFR) affects the population growth of a nation?
Ans:	

37.	There were 2 million people in Utopia in May 2004. Between May 2004 and May 2005, there were 10,000 births per month, and there were 8,000 deaths per month. Calculate the crude birth rate, death rate, and growth rate for the period of time 2004-05. Also calculate the doubling time for the population.
Ans:	

38.	<p>The figure represents hypothetical trends in the birth and death rates of a human population over time. Fill in the blanks with the appropriate letter (or letters). Each may be used more than once.</p> <p>Zero population growth occurs at time(s) _____, positive growth at time(s) _____, and negative growth at time(s) _____.</p>
Ans:	

39.	<p>The figure represents hypothetical trends in the birth and death rates of a human population over time. Fill in the blanks with the appropriate letter (or letters). Each may be used more than once.</p> <p>The maximum population growth rate occurs at time _____.</p>
Ans:	

40.	<p>The figure represents hypothetical trends in the birth and death rates of a human population over time. Fill in the blanks with the appropriate letter (or letters). Each may be used more than once.</p> <p>The maximum population size is at time _____.</p>
Ans:	

41.	Explain the fact that, even though the U.S. total fertility rate is below replacement level, the total population is still growing.
Ans:	

42.	Why are fertility rates in industrial countries significantly lower than in developing countries?
Ans:	

43.	List three fundamental ways by which any population with a positive growth rate can achieve zero population growth.
Ans:	

44.	Define and contrast exponential (geometric) growth and arithmetic growth.
Ans:	

45.	<p>An ecologist measures birth rates, death rates and population sizes of two populations (G and H) over many years, with the following results shown by the graphs below.</p> <p>Which populations are likely regulated by density dependent factors? Circle the appropriate answer (s).</p> <table border="1"> <tr> <td></td> <td><b>G</b></td> <td><b>H</b></td> <td><b>Both</b></td> <td><b>Neither</b></td> <td></td> <td></td> </tr> </table>						<b>G</b>	<b>H</b>	<b>Both</b>	<b>Neither</b>		
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Ans:	

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	<b>G</b>	<b>H</b>	<b>Both</b>	<b>Neither</b>								

Ans:	

47.	An ecologist measures birth rates, death rates and population sizes of two populations (G and H) over many years, with the following results shown by the graphs below.				
Which populations are likely to show prolonged exponential growth? Circle the appropriate answer(s).					
	<b>G</b>	<b>H</b>	<b>Both</b>	<b>Neither</b>	

Ans:	

48.	On our finite planet, human populations are, or eventually will be limited by some factors. These factors can be classified as short-term, medium-term and long-term factors. Name an example for each type of limiting factor.
Ans:	

49.	Name the three basic premises of Thomas Malthus' theory of human population.
Ans:	

50.	What is meant by the statement, "Technology continues to prove Malthus wrong"?
Ans:	

51.	Why do chronic diseases cause a much larger portion of the mortality in developing countries than in industrial countries?
Ans:	

52.	The graph below shows the population parameters of two countries. Both countries are the same in all of their population characteristics <u>except</u> their age distributions.
The population of what country might be an example of a stationary age structure?	
Ans:	

53.	The graph below shows the population parameters of two countries. Both countries are the same in all of their population characteristics <u>except</u> their age distributions.
Describe how the populations of Country 1 (left) and Country 2 (right) are likely to change over the next twenty years.	
Ans:	

54.	The graph below shows the population parameters of two countries. Both countries are the same in all of their population characteristics <u>except</u> their age distributions.
Which country could best be described as being in a demographic trap?	



Ans:	

55.	Give examples of a short-term, an intermediate-term, and a long-term factor that can disrupt the distribution of food within a country.
Ans:	

56.	Why do high fertility rates tend to trap developing countries in a cycle of increasing poverty?
Ans:	