

Test: Ecology NCE - HS

Question 1 of 75

Specialized bacteria and blue-green algae are capable of what ammonia producing process?

- A) Oxygen fixation
- B) Nitrogen fixation
- C) Haber Process
- D) Ostwald Process

Question 2 of 75

On land, over 90% of the water reaches the atmosphere through what process that begins on the surfaces of plants?

- A) Turgor pressure
- B) Cavitation
- C) Ablation
- D) Transpiration

Question 3 of 75

What London born primatologist is best remembered for her contributions to studying chimpanzees at Gombe National Park?

- A) Tracy Perkins
- B) Tina Atlas
- C) Diane Waterman
- D) Jane Goodall

Question 4 of 75

What terrestrial biome is separated into "dry forests" and "rainforests"?

- A) Amazonia Forests
- B) Everglade Forests
- C) Taiga Forests
- D) Tropical Forests

Question 5 of 75

What author wrote about the dangers of DDT in Silent Spring?

- A) Cole Whitehead
- B) Rachel Carson
- C) Leah Smithson
- D) Trystan McMann

Question 6 of 75

What is the capacity of systems both natural and human cultured to survive and flourish?

- A) Perseverance
- B) Lockwood Limit
- C) Sustainability
- D) Limiting Capacity

Question 7 of 75

The countries Bolivia, Chile, and Argentina have about 80% of the global reserves of what element which is used in rechargeable ion batteries?

- A) Tungsten
- B) Lithium
- C) Oxygen
- D) Helium

Question 8 of 75

What geographical feature releases molten rock from the Earth's interior?

- A) Volcano
- B) Crater
- C) Geyser
- D) Mountain

Question 9 of 75

What fractures in the Earth's crust can suddenly break causing an earthquake?

- A) Crack line
- B) Carper
- C) Creep
- D) Fault

Question 10 of 75

Which of the following is a technique for conserving soil resources and fertility?

- A) Crop elevation
- B) Crop rotation
- C) Crop microing
- D) Crop rocking

Question 11 of 75

What campaign symbol had a slogan that "Only YOU can prevent forest fires."?

- A) Lenny the Alligator
- B) Smokey the Bear
- C) Sammy the Deer
- D) Happy the Hippo

Question 12 of 75

What term refers to behavior that results in one species preying another?

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- A) Symbiosis
 - B) Predation
 - C) Hunting
 - D) Parasitism

Question 13 of 75

What kind of species maintains the health of many surrounding species in the same environment and whose extinction may dramatically alter the function and structure of a community?

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- A) Impact species
 - B) Critical species
 - C) Keystone species
 - D) Indicator species

Question 14 of 75

An interaction that benefits one species with little to no impact on the other species is _____?

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- A) Parasitism
 - B) Free Rider
 - C) Mutualism
 - D) Commensalism

Question 15 of 75

What term refers to the increase in concentration of toxins while moving higher up the food chain?

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- A) Biomagnification
 - B) Food Chain Regression
 - C) Food Chain Multiplier
 - D) Toxin Amplification

Question 16 of 75

What national park in Tanzania is famed for its Wildebeest migration?

- A) Serengeti National Park
- B) Big Bend National Park
- C) Lake Malawi National Park
- D) Golden Gate Highlands National Park

Question 17 of 75

Which of the following is a symbiotic relationship between algae and fungi?

- A) Mitkan
- B) Aotlan
- C) Eopen
- D) Lichen

Question 18 of 75

Which of the following is an example of biological control?

- A) Introducing beavers to produce natural dams on rivers
- B) Introducing parasitic wasps to combat aphid population
- C) Building a physical barrier such as a fence to prevent migration
- D) Reintroducing wolves to Isle Royale after a plummet in population

Question 19 of 75

Which of the following is an example of mutualism?

- A) Badgers and snakes
- B) Anemones and clownfish
- C) Termites and anteaters
- D) Bears and trees

Question 20 of 75

What number refers to the amount of a population an environment can sustain given available resources?

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- A) Limiting Capacity
 - B) Survivability Capacity
 - C) Potential limit
 - D) Carrying Capacity

Question 21 of 75

What is the name of water bearing surfaces found in the ground?

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- A) Aquifers
 - B) Aqueducts
 - C) Reservoirs
 - D) Drains

Question 22 of 75

In tropical rainforests, what strata is highest in height?

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- A) Emergent layer
 - B) Under story
 - C) Canopy
 - D) Shrub layer

Question 23 of 75

Sherwood Rowland and Mario Molina were among the scientists that demonstrated what additives were harmful to the environment and depleting the ozone layer at the south pole?

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- A) CFCs
 - B) CFDs
 - C) CFBs
 - D) CFQs

Question 24 of 75

What collection of marine debris is actually two distinct collections bounded by the namesake ocean's subtropical gyre?

- A) Great Atlantic Garbage Patch
- B) Great Indian Garbage Patch
- C) Great Pacific Garbage Patch
- D) Great Arctic Garbage Patch

Question 25 of 75

What term refers to a dry area on the leeward side of a mountainous area?

- A) Sun shade
- B) Rain shade
- C) Sun shadow
- D) Rain shadow

Question 26 of 75

What biome can be typed into Meadows, Steppes, and Savannahs?

- A) Tundra
- B) Taiga
- C) Woodlands
- D) Grasslands

Question 27 of 75

What mammals lay eggs rather than bearing their young in the womb?

- A) Nectators
- B) Allotremes
- C) Monotremes
- D) Polytrems

Question 28 of 75

What insect is suffering from an abnormal disappearance known as colony collapse disorder?

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- A) Mosquitos
 - B) Ants
 - C) Honey Bees
 - D) Dragon flies

Question 29 of 75

What type of species is characterized by high growth rate, producing many offspring with low probability of survival?

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- A) m-selection
 - B) r-selection
 - C) k-selection
 - D) b-selection

Question 30 of 75

What set of nonlinear differential equations initially developed in 1910 for use in chemistry is now used to model predator prey relationships?

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- A) Hulst-Trystan
 - B) Fare-Mallus
 - C) Terram-Molllow
 - D) Lotka-Volterra

Question 31 of 75

What country from 2016-2020 has had the largest ecological footprint per capita and runs a biocapacity deficit of -14.14?

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- A) Luxembourg
 - B) Kuwait
 - C) United States
 - D) China

Question 32 of 75

What sort of substances are classified as either point source or non-point source?

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- A) Carcinogens
 - B) Pollutants
 - C) Clathrates
 - D) Greenhouse gases

Question 33 of 75

Evaporation, transpiration, runoff, condensation, and precipitation are all part of what cycle?

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- A) Hygrolic cycle
 - B) Hypergolic cycle
 - C) Hydrologic cycle
 - D) Hydrolitic cycle

Question 34 of 75

What process refers to gradual change in species composition in a given area?

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- A) Ecological Evolution
 - B) Ecological Progression
 - C) Ecological Succession
 - D) Ecological Revolution

Question 35 of 75

What rate can be measured at a "replacement level" to determine the average number in one generation needed to replace the previous generation?

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- A) Death rate
 - B) Birth rate
 - C) Hand-off rate
 - D) Fertility rate

Question 36 of 75

What three staple foods make up two-thirds of the world's food energy intake?

- A) Nuts, beans, wheat
- B) Wheat, corn, and rice
- C) Meat, fruits, wheat
- D) Corn, rice, and beans

Question 37 of 75

Which of the following is a class of microscopic photosynthetic algae, protists, and bacteria?

- A) Phytoflagellates
- B) Phytolindos
- C) Phytoplankton
- D) Phytodomms

Question 38 of 75

What term refers to all animal life in a particular region?

- A) Flora
- B) Zoota
- C) Biota
- D) Fauna

Question 39 of 75

What is the biggest dam in the United States?

- A) Thief Valley Reservoir
- B) Hoover Dam
- C) International Falls Dam
- D) Glen Canyon Dam

Question 40 of 75

What activity is principally responsible for degradation and destruction of 58% of the world's coastal sea-grass beds?

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- A) Dredging
 - B) Mining
 - C) Surfing
 - D) Scuba diving

Question 41 of 75

The world's largest hydroelectric dam sits on a river in what country?

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- A) Mexico
 - B) United States
 - C) India
 - D) China

Question 42 of 75

Egrets and Bitterns are members of what class of birds?

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- A) Herons
 - B) Cranes
 - C) Ibises
 - D) Storks

Question 43 of 75

What state is the Petrified National Forest in?

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- A) Alaska
 - B) Oregon
 - C) Arizona
 - D) Minnesota

Question 44 of 75

Maasai Mara National Reserve is located in what country?

- A) Ethiopia
- B) Kenya
- C) Uganda
- D) Somalia

Question 45 of 75

Humpback whales are known to jump out of the water, a behavior known by what term?

- A) Posing
- B) Breaching
- C) Sailing
- D) Arching

Question 46 of 75

Which of the following is a term to describe the migratory pattern of birds between their breeding grounds and winter holdings?

- A) Fly path
- B) Flight path
- C) Flight line
- D) Flyway

Question 47 of 75

What zoo opened in 1889 is a part of the Smithsonian Institute?

- A) Chester Zoo
- B) National Zoo
- C) The American Zoo
- D) Lincoln Park Zoo

Question 48 of 75

Who argued that famine, plague, and war would result if limits on birth weren't imposed in "Essay on the Principle of Population"?

- A) John Stuart Mill
- B) Adam Smith
- C) Thomas Malthus
- D) David Ricardo

Question 49 of 75

What environmental phenomenon occurs due to addition or loss of a top predator in a food chain?

- A) Autic response
- B) Trophic cascade
- C) Locotic cascade
- D) Regeneration response

Question 50 of 75

What English naturalist proposed the theory of evolution independently of Charles Darwin?

- A) Francis Drake
- B) Samuel Fairchild
- C) Alfred Russel Wallace
- D) David Kensington

Question 51 of 75

What form of mimicry sees two species share an honest signal that they are dangerous to eat?

- A) Redandian mimicry
- B) Argonian mimicry
- C) Batesian mimicry
- D) Møllerian mimicry

Question 52 of 75

What climate classification system uses three letters to designate a climate based on climate group, seasonal precipitation, and temperature?

- A) Sanchez classification
- B) Miller classification
- C) Köppen classification
- D) Ramboud classification

Question 53 of 75

What term refers to how species differences are accentuated in areas where they co-occur and are minimized otherwise?

- A) Character displacement
- B) Geographic accenting
- C) Adaptive radiation
- D) Feature trading

Question 54 of 75

What term describes the advertising an animal does to avoid being attacked or eaten?

- A) Warning signalling
- B) Trait Wrenching
- C) Malocatism
- D) Aposematism

Question 55 of 75

What oceanic circulation sometimes referred to as "the earth's conveyor belt" is driven by temperature and salinity induced density differences between water masses?

- A) Thermohaline circulation
- B) Adiabatic Halide Circulation
- C) Ignosaline circulation
- D) Halocaloric circulation

Question 56 of 75

What hypothesis proposed by James Lovelock and Lynn Margulis suggests that our planet's biosphere acts like a self-regulating organism?

- A) Trestle hypothesis
- B) SRE hypothesis
- C) Living Earth hypothesis
- D) Gaia hypothesis

Question 57 of 75

Polar regions are home to what thick subsurface layer of soil that remains frozen throughout the year?

- A) Permafrost
- B) SupraiceÊ
- C) Superfrost
- D) Overice

Question 58 of 75

What "anti-trade" winds exist in the middle latitudes between 30 and 60 degrees latitude?

- A) Easterlies
- B) Undercoast winds
- C) Westerlies
- D) Overcoast winds

Question 59 of 75

John Muir helped found and establish which club that promotes environmental preservation?

- A) Oak Hills Club
- B) Sierra Club
- C) Canyon Club
- D) Wildlife Protection Club

Question 60 of 75

What classification is given to fish that migrate from the sea up to freshwater to spawn, such as salmon and the sea lamprey?

- A) anergic
- B) Catanergic
- C) anadromous
- D) catadromous

Question 61 of 75

To calculate the age of the earth, you could use the formation rate of zircon crystals and the radioactive decay rate of Uranium isotopes into what element as a proxy?

- A) Plutonium
- B) Lead
- C) Chlorine
- D) Arsenic

Question 62 of 75

What form of

- A) Allopatric speciation
- B) Sympatric speciation
- C) Isotopic speciation
- D) Aleatoric speciation

Question 63 of 75

What zone refers to the bottom surface of a lake environment as opposed to the open water?

- A) Littoral Zone
- B) Pelagic Zone
- C) Benthic Zone
- D) Photic Zone

Question 64 of 75

What hard form of coal has high heat content and low sulfur content and is made by pressurizing bituminous coal?

- A) Lignite
- B) Diamond
- C) Peat
- D) Anthracite

Question 65 of 75

Which of the following is a small rodent usually found in tundra biomes?

- A) Squirrels
- B) Mopos
- C) Teeters
- D) Lemmings

Question 66 of 75

Branching complexity of a river is measured by what number?

- A) Cromer number
- B) Wallace number
- C) Strahler number
- D) Geoffrey number

Question 67 of 75

What drilling rig's MODU (Mobile Offshore Drilling Unit) was drilling oil for BP before an explosion and fire caused a massive oil spill in the Gulf of Mexico?

- A) Dive Exploration
- B) Offshore Express
- C) Plunge Skyline
- D) Deepwater Horizon

Question 68 of 75

What is the principal vegetation of the Kalahari desert?

- A) Linden
- B) Calico
- C) Acacia
- D) Megaria

Question 69 of 75

What ecosystems consist of the thin strips of vegetation along streams or rivers?

- A) Terraria zones
- B) Flourish zones
- C) Aquata zones
- D) Riparian zones

Question 70 of 75

What seed dispersal technique relies on wind as a vector, such as the spreading of dandelion seeds?

- A) Allochory
- B) Blastochory
- C) Ballochory
- D) Anemochory

Question 71 of 75

Temperate shrubland found along coastal California is a biome referred to with what basque-derived name?

- A) Hortilli
- B) ArrosaÊ
- C) Chaparral
- D) Arboreal Plains

Question 72 of 75

The hanging vines in tropical rain forests are known by what name?

- A) Tartle
- B) Zeem
- C) Lianas
- D) Kudzu

Question 73 of 75

Who advocated the idea of a "land ethic" in his non-fiction book A Sand County Almanac?

- A) Aldo Leopold
- B) Van Jefferson
- C) Timothy Etzkorn
- D) Hugh McVey

Question 74 of 75

What British scientist is often called the "father of modern ecology" and was the first scientist to describe the paradox of the plankton?

- A) Trevor Treewater
- B) Tracy Smith
- C) Evelyn Hutchinson
- D) Edward Falken

Question 75 of 75

Which of the following is a proposed negative feedback loop between marine biota and climate?

- A) CLAW hypothesis
- B) DRAW hypothesis
- C) LAW hypothesis
- D) MAW hypothesis