

NAME_(PRINT)_____

DO EITHER THE FIRST 50 QUESTIONS OR THE ENTIRE EXAM

1. Which ship was the first to measure the Mariana Trench's depth?
 - a. Beagle
 - b. Tyger of Amsterdam
 - c. Costa Concordia
 - d. Challenger**

2. When the glaciers move south, the ocean levels
 - a. rise
 - b. fall**
 - c. remain the same
 - d. become more acidic

3. El Niño has a parallel in
 - a. The Indian Ocean monsoons**
 - b. The hurricane season in the United States
 - c. The tornado season on the Great Plains
 - d. The typhoon season in East Asia

4. Most marine organisms are found
 - a. In the intertidal zone
 - b. In the area over the continental shelf**
 - c. Below the sea bottom
 - d. In the deepest parts of the ocean

5. Which can be found in the Peoples of the Pacific Hall?
 - a. Weapons with shark teeth
 - b. Shells that can be blown as musical instruments
 - c. Shell and wood objects used for navigation
 - d. all of these**

6. Which chronological order was proposed by Darwin?
 - a. Atoll, fringing reef, barrier reef
 - b. Atoll, barrier reef, fringing reef
 - c. Barrier reef, fringing reef, atoll

d. Fringing reef, barrier reef, atoll

7. The loss of an organism in the middle of the food chain (i.e. a secondary predator) can have an effect
 - a. On organisms higher up in the food chain
 - b. On organisms further down the food chain
 - c. Both of these**
 - d. Neither (a) nor (b)

8. Which of the following are mammals
 - a. Sharks
 - b. Manatees**
 - c. Rays
 - d. Moray eels

9. All autotrophs
 - a. Are very large
 - b. Are all microscopic
 - c. Are all marine
 - d. None of the above**

10. Biomagnification refers to
 - a. Looking at microscopic organisms through a microscope
 - b. The increase in size of an organism over time
 - c. Increases in toxic materials moving up the food chain**
 - d. The growing importance of an organism in the economy

11. Increasing amounts of carbon dioxide in the ocean
 - a. Is beneficial to shell fish
 - b. Can be detrimental to shell fish**
 - c. Has no effect on shell fish
 - d. Causes the ocean to become less acidic

12. Eutrophication is often caused by the introduction of
 - a. HABs (harmful algae blooms)
 - b. Nitrogen**
 - c. Oxygen
 - d. Jellyfish

13. An organism with a membrane surrounded nucleus is called
 - a. A eukaryote**

- b. A prokaryote
 - c. An animal
 - d. A plant
14. A depth range over which some aspect of the water is markedly different than on the other is called
- a. A limiting factor
 - b. An upwelling
 - c. A cline**
 - d. A meridian
15. The Coriolis Effect causes winds and currents to
- a. Move to the right everywhere
 - b. Move to the right in the southern hemisphere
 - c. Move to the right in the Northern hemisphere**
 - d. Becomes more intense at the equator
16. Oxygen is removed from the surroundings when
- a. Photosynthesis is occurring
 - b. Organic material decays**
 - c. CO₂ is absorbed by the ocean
 - d. None of these
17. When respiration takes place, CO₂ moves from
- a. The hydrosphere to the lithosphere
 - b. The biosphere to the atmosphere**
 - c. The lithosphere to the hydrosphere
 - d. The atmosphere to the biosphere
18. Which function does a wetland serve?
- a. Filtering materials out of water
 - b. Keeping erosion from happening
 - c. Serving as a breeding grounds for many organisms
 - d. All of these**
19. The lowest of the low tides are called
- a. Spring tides
 - b. Ebb tides
 - c. Neap tides**
 - d. None of these

20. Which of the following has the greatest effect on the tides
- The Sun
 - The Moon**
 - Mars
 - The Gulf Stream
21. What is it called when there is little or no oxygen in the water?
- Toxic shock
 - Black smoke
 - Anoxia**
 - turbidity
22. In the Hall of Ocean life, bioluminescence is shown in the case dealing with
- Deep ocean environments**
 - estuaries
 - mangrove swamps
 - polar oceans
23. Species which are moved into new environments are known as
- Immigrant species
 - Harmful algae blooms
 - Alien or invasive species**
 - None of these
24. Small boat commercial fishermen often ignore catch regulation because:
- They are greedy
 - They have no other way to make money**
 - They are sure the government is lying to them
 - They don't know they shouldn't take too many fish
25. The recovery of a species from over exploitation is dependent on
- Gestation periods (length of pregnancy)
 - How many fish are in the population
 - The age at which the species becomes sexually mature
 - All of these**
26. Which of the following is not a taxonomic classification
- nekton
 - algae

- c. benthic
 - d. none of the above are taxonomic classifications**
27. "Ghost fishing" has to do with
- a. A tale about a supernatural trying to catch ghostly fish
 - b. Marine life which is caught in fishing line and other gear left in the ocean which will not be retrieved by anyone**
 - c. A ghost ship which trawls and catches fish and brings them on board
 - d. A person who sneaks away from their job to go fishing
28. Growth overfishing means
- a. Taking only large adult fish
 - b. Taking only smaller fish**
 - c. Taking fish of all sizes indiscriminately
 - d. Always taking more fish than previously
29. What is your approximate longitude if you have been sailing from California toward Asia and you crossed the Great Circle a few minutes ago?
- a. 179 degrees east**
 - b. 179 degrees west
 - c. 181 degrees east
 - d. 181 degrees west
30. The International Whaling Commission in its regulations distinguishes
- a. Commercial whaling
 - b. Scientific whaling
 - c. Aboriginal whaling
 - d. All of these**
31. One of the worries in salvaging the Costa Concordia Cruise ship was that
- a. They wouldn't make enough money to cover the expenses
 - b. That it would take away a tourist attraction
 - c. That it would drift out to sea
 - d. That the hull might rupture and produce an oil spill**
32. Micro beads are very small plastic beads that are commonly found in
- a. Shampoos

- b. Tooth paste
 - c. Soap
 - d. All of these**
33. The difference in terms of current "climate change" with previous changes in the last 1,000,000 years is
- a. The speed with which it is happening is slower than before
 - b. That the earth has never been this warm
 - c. There has never been this much input from humans before**
 - d. That previous climate changes, unlike this one, were not accompanied by extinctions which this one is
34. What chemical was involved in the Minamata disaster?
- a. Mercury**
 - b. Iridium
 - c. Thallium
 - d. Nitrogen
35. Water over the continental shelf is called
- a. Littoral
 - b. Neritic**
 - c. Pelagic
 - d. Hadalpelagic
36. Which is the highest level taxon in this list?
- a. Genus
 - b. Family
 - c. Class**
 - d. Order
37. Clades and cladistics are involved with
- a. classifying organisms**
 - b. classify types of ships
 - c. specifying types of environments
 - d. measuring certain aspects of sea water
38. Wetlands are often endangered because
- a. They occur where rivers meet the ocean and these are places people tend to build cities for ports
 - b. The rising sea levels can inundate them

- c. Rivers are diverted
 - d. All of these**
39. Fish that are caught unintentionally and then thrown back dead into the sea are known as
- a. By catch**
 - b. Anadromous fish
 - c. Catadromous fish
 - d. Surplus fish
40. Pollywogs and Sons of Neptune are associated with
- a. Frogs
 - b. Crossing the line ceremonies**
 - c. Environmentalist groups
 - d. None of these
41. Symbols differ from signs in that
- a. Signs are arbitrary
 - b. Signs and symbols are the same thing
 - c. Symbols are arbitrary**
 - d. Symbols are metal musical instruments you strike together
42. The approximate depth at which there are radical changes in salinity, temperature, light and so on is
- a. 10 meters
 - b. 33 feet
 - c. 50 meters**
 - d. 1000 feet
43. Navigation charts for currents and stars are made of wood and shells by what people?
- a. Australian aborigines
 - b. The Makah Indians
 - c. The Phoenicians the model.
 - d. Polynesians**
44. Most waves are caused by
- a. Tides
 - b. Winds**
 - c. Ships
 - d. Pressure

45. In what part of the world have rising sea levels caused problems with burials?
- a. China
 - b. Japan
 - c. The Pacific Islands**
 - d. Peru
46. Which of the following are seen as a "pariah" group?
- a. The Makah
 - b. The Eta**
 - c. The Iroquois
 - d. The Adena people
47. Which of the following is not exhibited in the Peoples of the Pacific Hall
- a. Japan**
 - b. Polynesia
 - c. Micronesia
 - d. Melanesia
48. The greatest water disaster in terms of loss of life occurred in the United States in
- a. Galveston, Texas**
 - b. San Francisco, California
 - c. New Orleans, Louisiana
 - d. Lituya Bay, Alaska
49. What is the number of this course?
- a. EESC 101
 - b. Music 101
 - c. EESC 1050**
 - d. None of the above
50. What do chemosynthesis and photosynthesis have in common?
- a. They both produce oxygen
 - b. They allow organisms to be autotrophs**
 - c. They allow organisms to become motile (move around)
 - d. They both require sunlight

END OF THE 50 QUESTION EXAM

51. The oceans cover about
- a. 1/3 the earth's surface
 - b. About 1/2 the earth's surface
 - c. About 71%**
 - d. About 99%
52. Which is the major regulating body about the environment ?
- a. The U.S. Coast Guard
 - b. The Environmental Protection Agency**
 - c. The National Oceanographic and Atmospheric Administration
 - d. The National Weather Service
53. Organisms that are born in salt water but live mostly in fresh water
- a. Are anadromous
 - b. Are catadromous**
 - c. Are bi-hydral
 - d. Are bi-aqual
54. What famous scientist first theorized that atolls developed from a combination of a sinking islands and coral build-up
- a. Wegener
 - b. Ekman
 - c. Darwin**
 - d. Cousteau
55. Imaginary lines running from the north to the south pole are called
- a. Longitude lines**
 - b. Latitude lines
 - c. The equator
 - d. The Arctic and Antarctic Circles
56. The Beaufort scale is used to measure
- a. Wave speed
 - b. Earthquakes
 - c. Speed of winds**
 - d. Quantity of minerals dissolved in water
57. An animal which helps control excessive grazing on kelp is
- a. The sea otter**

- b. Sea urchins
 - c. Star fish
 - d. Clams
58. Which is not an animal?
- a. sponge
 - b. jellyfish
 - c. kelp**
 - d. sea cucumber
59. Which of the following is a filter feeder?
- a. Blue whales**
 - b. Tiger sharks
 - c. Giant squid
 - d. None of these
60. Which of the following can have a negative impact on marine organisms?
- a. Salinity
 - b. Temperature
 - c. Large scale weather phenomenon
 - d. All of these**
61. Residence time refers to
- a. how long an element stays in a given sphere**
 - b. how long and organism stays in its ecological niche
 - c. how long a sperm whale can stay underwater
 - d. none of there
62. In the two-layered ocean discussed in class, the upper layer contains
- a. Sunlight**
 - b. Infauna
 - c. Most nutrients
 - d. Benthic animals
63. At the North Pole, how many of the visible stars are circumpolar?
- a. None
 - b. All**
 - c. 90 %
 - d. 50%

64. The ship associated with a major oil spill is
- Costa Concordia
 - Piper alpha
 - Exxon Valdez**
 - Deep Water Horizon
65. The largest oil spill was involved with
- Piper Alpha
 - Ranger
 - Deepwater Horizon**
 - Exxon Valdez
66. Some oil has been removed from the ocean water after spills by
- Bacteria
 - Adsorbtion
 - Controlled fires
 - All of these**
67. The disaster which was in part responsible for the beginnings of the science of seismology occurred in
- Fukushima
 - Galveston
 - Santorini
 - Lisbon**
-
68. If something is said to be degradable by light, it is called
- Biodegradable
 - Chemodegradable
 - Photodegradable**
 - Oxydegradable
69. Banana and orange peels are said to biodegrade in a few weeks, but some have been found in garbage dumps after 25 years! What would explain that?
- There is no light
 - There are no organisms there to break them down**
 - There is a problem dating how long they were actually there
 - They aren't really biodegradable
70. One of the things that takes the longest to degrade (if it degrades at all) is

- a. Organic material
 - b. Paper
 - c. Glass**
 - d. Wool socks
71. Oil can be consumed by some bacteria so it is biodegradable. So why worry about oil spills from tankers?
- a. There aren't enough bacteria that can degrade a spill of that size**
 - b. Even in a short time a spill can do considerable damage to many kinds of organisms
 - c. The cost of cleaning it is passed on to consumers of oil who have to pay a higher price for fuel
 - d. All of these
72. An important fishing industry impacted by El Niño and overfishing is one dealing with
- a. Tuna
 - b. Seals
 - c. Anchovies**
 - d. Tilapia
73. In years with a strong El Niño winds blow from which direction?
- a. North
 - b. South
 - c. East
 - d. West**
74. New seas and gulfs can be created by
- a. Movement of tectonic plates
 - b. Rising sea levels
 - c. Both of these**
 - d. Neither of these
75. Eutrophication involves
- a. The increased availability of an otherwise limiting factor
 - b. Often produces large algae blooms
 - c. Can lead to deoxygenation of water
 - d. All of these**

76. Primary producers are
- a. **Autotrophs**
 - b. Heterotrophs
 - c. Predators
 - d. None of these
77. In which Biblical book does a list of food tabus appear?
- a. Genesis
 - b. **Leviticus**
 - c. Deuteronomy
 - d. Numbers
78. Early anthropologists thought there was an early evolutionary sequence that went
- a. **From magic to religion to science**
 - b. From magic to science to religion
 - c. From religion to magic to science
 - d. None of there
79. Which of the following is exclusively a marine animal?
- a. penguins
 - b. pinnepeds
 - c. **manatee**
 - d. walruses
80. The term "anthropomorphism" means
- a. **Attributing human characteristics to non-humans**
 - b. Giving things the shape of human
 - c. Applies only to mammals
 - d. Applies only to plants
81. About how long ago did the recent ice age begin to end?
- a. 300 years ago
 - b. **15,000 years ago**
 - c. 500,000 years ago
 - d. 1,000,000 years ago
82. The Bay of Fundy is known for its
- a. **very high tides**
 - b. sponge industry
 - c. pearl fishing

- d. use of tides for creating electricity
83. Which part of Darwin's theory had to be modified?
- a. Natural variation**
 - b. Struggle for existence
 - c. Natural selection
 - d. Survival of those more adapted
84. Typically, how many high tides occur each day?
- a. 2**
 - b. 4
 - c. 1
 - d. None of these
85. Which is a form of primary production?
- a. Grazing
 - b. Chemosynthesis**
 - c. Fish farming
 - d. None are forms of primary production
86. A disease that affects deep sea divers is
- a. Minamata disease
 - b. Decompression sickness**
 - c. Toxic poisoning
 - d. None of these
87. The aphotic zone is also known as
- a. Bathypelagic**
 - b. Littoral
 - c. epipelagic
 - d. benthic
88. As water chills at the poles
- a. It becomes denser
 - b. It loses its minerals
 - c. It sinks to the bottom and begins to move toward the equator
 - d. All of these**
89. Sargassum refers to
- a. A seaweed**
 - b. An echinoderm

- c. A fungus
 - d. One of the Archea
90. Who made the earliest contributions to knowledge about the sea?
- a. Capt. James Cook**
 - b. Charles Darwin
 - c. Charles Wyville Thomson
 - d. D. Jacques Cousteau
91. Magic often appears when
- a. The rest of the supernatural structure lacks gods
 - b. When there is no science
 - c. When there is high risk**
 - d. None of these
92. "Fetch" refers to
- a. The speed of the wind
 - b. The duration of the wind
 - c. The strength of the wind
 - d. The distance over which wind travels unbroken**
93. The term tidal wave is the same things as
- a. A tsunami
 - b. A rogue wave
 - c. A wind driven wave
 - d. None of these**
94. One of the problems had by the Mary Celeste was
- a. A defective chronometer**
 - b. A defective rudder
 - c. An uncooperative crew
 - d. None of these
95. Which of the following have rather different technical meanings than usage meanings?
- a. Tale
 - b. Theory**
 - c. Guess
 - d. None. All have the same technical and usage definitions
96. The Sapir Whorf hypothesis deals with

- a. Plate tectonics
 - b. Language and culture and perception**
 - c. Evolution
 - d. Ocean currents
97. According to Malinowski, the most important way that science differs from religion is that
- a. Science is in the profane, magic in the sacred**
 - b. Science knows how things really work, whereas magic doesn't
 - c. Magic is more like science than religion
 - d. Science appears when religion fails.
98. Which is not an animal?
- a. sponges
 - b. protists**
 - c. echinoderms
 - d. arthropods
99. Sharks
- a. Are cartilaginous**
 - b. Are all capable of eating people
 - c. Are aquatic mammals
 - d. Kill more people than people kill them
100. Nomura jellyfish are found largely
- a. In the South Pacific
 - b. In the area around East Asia**
 - c. In the area around North Africa
 - d. Close to the West coast of the United States