



2022 REGIONAL ENVIROTHON

Aquatics Test (25 total points)

INSTRUCTIONS: Write your answers on the Respondent Sheet.

MATCHING: Match the term to the description that best fits.

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|--------------------------|----------------------------|----------------------|
| A. European watermilfoil | G. Duckweed | M. White water lily |
| B. Amphipods | H. Tertiary Consumer | N. Phytoplankton |
| C. Coontail | I. Lacustrine wetlands | O. Zooplankton |
| D. Fen wetland | J. Wetlands | P. Primary consumers |
| E. Palustrine wetlands | K. Prairie pothole marshes | |
| F. Invertebrates | L. Sago pondweed | |

- _____ Wetland marshes that are the result of glacial movement
- _____ A wetland with no visible water, rich in biodiversity, and usually alkaline
- _____ Tiny shrimp-like detritivores
- _____ Plant that grows underwater with floating leaves
- _____ Branching underwater plant that is a favorite food among ducks and geese
- _____ Base of the food chain in many aquatic environments
- _____ These types of ecological systems are considered the most productive and diverse biological communities on Earth
- _____ A widespread invasive plant species
- _____ Wetland that borders the edge of a large body of water and has emergent and submersed plants
- _____ Walleye and largemouth bass

MULTIPLE CHOICE: Select the best possible answer from those provided.

- The bottom 1/3 tier of Iowa has most of the farm ponds.
 - True
 - False
- The common carp is a member of which family of fish?
 - Sunfish
 - Perch
 - Minnow
 - Sucker

13. An aquatic environment composed of running water, such as streams and rivers, is called a _____.
- Lentic ecosystem
 - Watershed
 - Lotic ecosystem
 - Riverine wetland
14. The number of all wetlands that were historically found in Iowa _____.
- Has increased due to government incentives
 - Has been reduced about 95%
 - Has been reduced almost 50%
 - Has remained about the same.
15. What type of plant is arrowhead?
- Emergent
 - Submersed
 - Free-floating
 - Tertiary
16. Floodplains are _____.
- Areas in a field where water stands following a heavy rain
 - Low lying areas that border only some water bodies
 - Are flood prone areas where human development is always restricted
 - Are nature's storage area for heavy rains that help reduce downstream flooding
17. Which one of the following statements is true concerning trout species in Iowa?
- There are only about 25 cold water trout streams in Iowa
 - Most trout streams in Iowa are in the northwest part of the state
 - There are three different species of trout present in the state
 - Iowa's trout streams are state owned
18. Oxbows are found in _____.
- Upper reaches of a river
 - Lakes that are filled in with nutrients
 - Abandoned river channels that are cut off from the river
 - Prairie potholes that are enlarged
19. Runoff from home lawns can add what to Iowa's surface waters?
- Sediment
 - Nutrients
 - Pesticides
 - A and C only
 - All of the above

20. Fish are identified using body shape, fins, scales, and mouth shape. Where is the caudal fin located?
- Tail
 - Belly
 - Behind the gills
 - Back
21. If over _____ of a watershed is converted to impervious surfaces, significant ecologic damage can occur from polluted runoff, lack of ground water recharge, and increased flooding.
- 2%
 - 10%
 - 25%
 - 30%
22. Rain gardens should be designed to handle the runoff from _____ inches of rain.
- 1.25
 - 2
 - 2.25
 - 3
23. A watershed is generally defined as _____.
- A building that stores water
 - All the land area that drains to a common point or water body
 - All the water area that drains to a given point in a landform
 - A moment in time when you cross into a new area.
24. What is the most common form of nitrogen found in streams and lakes?
- Phosphorus
 - Nitrite
 - Nitrate
 - All of the above
25. Wetlands help improve water quality by _____.
- Removing pollutants from surface water
 - Releasing sediment
 - Allowing nutrients and organic waste to flow
 - All of the above

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TEST REVISION DATE	02/14/2022
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