

2008 Envirothon
Area 5 Soil and Water Conservation Districts
Shawnee State Park
Aquatics Ecostation

Please use a pencil to complete your answer sheet
DO NOT WRITE ON THIS TEST

1. A stream that does not flow during part of the year is referred to as a(n):
 - A. Intermittent Stream
 - B. Headwater Stream
 - C. Second Order Stream
 - D. Small River
2. What is the optimal pH range for aquatic life?
 - A. 4.5 – 6.5
 - B. 6.5 – 8.2
 - C. 8.9 – 11.0
 - D. 3.5 – 5.5
3. The following is an example of a biological indicator used in stream and river assessment?
 - A. pH
 - B. Conductivity
 - C. Temperature
 - D. Macroinvertebrates
4. How many miles of stream exist in the state of Ohio?
 - A. 230,424
 - B. 12,344
 - C. 61,532
 - D. 106,233
5. Identify the main reason for endangered status of wetland species.
 - A. Disease
 - B. Habitat Destruction

- C. Hunting and Trapping
 - D. Sedimentation
6. Refer to the Ohio Watershed Map. Turkey Creek is a direct tributary of:
- A. The Ohio River
 - B. The Scioto River
 - C. Scioto Brush Creek
 - D. Ohio Brush Creek
7. What is **Not** a possible effect of a dam on downstream water quality?
- A. Dissolved Oxygen changes.
 - B. Increased macroinvertebrate diversity
 - C. Temperature changes
 - D. Flow rates might be altered
8. What is a possible negative effect of removing sand and gravel from a streambed?
- A. May mitigate flood levels
 - B. Destroys habitat
 - C. Reinforces stream sides
 - D. The gravel that was removed may have been polluted
9. Which of the following groups of animals has the most species extinct from Ohio?
- A. Frogs
 - B. Turtles
 - C. Mollusks
 - D. Fish
10. Wetlands have been referred to as the cradle of life. Over 1/3 of Ohio's wildlife depends on wetlands for their survival. Which of the following species is most likely **Not** to use the wetland habitat?
- A. Muskrat
 - B. Eastern Box Turtle
 - C. Red-Winged Blackbird
 - D. Wood Duck

11. With the re-establishment of prime wildlife habitats in the last 50 years, many species have also been reintroduced into those habitats in Ohio. In 1995, a reintroduction took place with a wetland wildlife species. This species is the largest waterfowl native to North America with a wingspan as wide as seven to eight feet. Name this swan?
- A. Mute Swan
 - B. Trumpeter Swan
 - C. Tundra Swan
 - D. Whistling Swan
12. Which of the following is not native to North America?
- A. Brown Trout
 - B. Rainbow Trout
 - C. Rock Bass
 - D. Burbot
13. Locate the specimen marked "13." This macroinvertebrate species is an indicator of water quality. Identify the species
- A. Caddisfly
 - B. Stonefly
 - C. Mayfly
 - D. Crayfish
14. Locate the specimen marked "14." This fish is a species common in Southern Ohio streams. Identify this fish.
- A. Shiner
 - B. Minnow
 - C. Rainbow Darter
 - D. Bluegill
15. Streamside forested buffers help:
- A. Maintain cool stream temperatures for aquatic animals.
 - B. Preserve timber for future harvests.
 - C. Maintain logger safety near creeks.
 - D. Keep the creek clear of obstructions.

16. Altering or changing the habitat or flow of a stream is referred to as:
- A. Limnology
 - B. Restoration
 - C. Stabilization
 - D. Hydromodification
17. Which of the following Ohio watersheds is the largest?
- A. Hocking River
 - B. Scioto River
 - C. Little Miami River
 - D. Muskingum River
18. Excess herbicide running off a farm field into a nearby stream or river an example of:
- A. Point Source Pollution
 - B. Urban Surface Pollution
 - C. Non-point Source Pollution
 - D. Factory Pollution
19. What is the current percentage of Ohio's waterways that are meeting the Clean Water Act standards?
- A. Approximately 15%
 - B. Approximately 35%
 - C. Approximately 60%
 - D. Approximately 80%
20. Soil erosion increases the amount of sediment, nutrients, pesticides, and herbicides entering waterways, which can negatively impact fisheries. All the following are measures that can be taken to reduce soil erosion **Except**:
- A. Protective Cover Crops
 - B. Grassed Waterways
 - C. Conventional Tillage
 - D. Contour Farming
21. There are four waterfowl flyways in the United States. Which one covers Ohio?

- A. Pacific
- B. Central
- C. Mississippi
- D. Atlantic

22. Locate the specimen marked "22." This tree species prefers to grow in moist soils along streams and rivers. Identify this tree.
- A. American Sycamore
 - B. Green Ash
 - C. River Birch
 - D. White Oak
23. Locate the specimen marked "23." This evergreen species is native Ohio, usually found in deep hollows. Identify this tree.
- A. Norway Spruce
 - B. White Pine
 - C. Virginia Pine
 - D. Eastern Hemlock
24. Choose the word that best describes the overall in-stream habitat of the section of creek you are viewing.
- A. Poor
 - B. Moderate
 - C. Average
 - D. Excellent
25. The substrate of the stream is mostly comprised of:
- A. Sand
 - B. Silt
 - C. Cobble
 - D. Mud