Print the name of your Team/School on this page and EACH additional page. For each of the questions in this exam you will either circle the correct answer or fill in the blank space(s) provided.

Each of the following multiple-choice questions is worth 3 points.

1. Which Connecticut forest type is currently most predominant?
    A. Maple/Beech/Birch
    B. White/Red/Jack Pine
    C. Oak/Hickory
    D. Oak/Pine

2. Of the Top Ten tree species in our forests, this tree is currently #1 with 21%.
    A. Red Maple
    B. Sugar Maple
    C. Eastern White Pine
    D. Northern Red Oak

3. Red oak, white oak, and black oak species in our region tend to thrive best on
    A. wetland soils
    B. moist, well-drained soils
    C. dry, sandy soil
    D. land that has been recently tilled

4. Which of the following is an example of an anthropogenic disturbance?
    A. Development
    B. Wind
    C. Fire
    D. Pests/Pathogens

5. Which of the following is NOT an invasive plant species impacting Connecticut forests?
    A. Garlic Mustard
    B. Winged Euonymus
    C. Poison Ivy
    D. Autumn Olive

6. Which early successional species indicate this forest may have been non-forested land at one time?
    A. Oak, Hickory
    B. Elm, Red Maple, White Pine
    C. Sugar Maple, Birch, Beech
    D. Birch, Aspen, Highbush Blueberry

7. In the history of Connecticut forests, little tree cover remained in the early 1800's because of
    A. Agricultural abandonment
    B. Urbanization and exurbanization
    C. Peak agricultural development
    D. Pests and diseases

8. Which of the following machines is used on terrain that is too steep for conventional logging equipment?

    A. Skidder
    B. <mark>Yarder</mark>
    C. Wood splitter
    D. Delimber

9. Which of the following machines can cut, gather and cluster logs together?

    A. Log Loader
    B. Delimber
    C. <mark>Feller Buncher</mark>
    D. Skidder

10. Which of the following is most important to determine quality of sawtimber trees?

    A. Tree age
    B. <mark>Straight trunk</mark>
    C. Location
    D. Crown size.

Questions #11-20 relate to specific trees or areas marked in this forest.

11. **Tree A** shows evidence of damage mostly by

    A. <mark>Woodpeckers</mark>
    B. Emerald Ash Borer
    C. Deer
    D. Rodents

We depend on Connecticut forests in many ways. What product might we get from Tree B and Tree C?

12. **Tree B** might produce

    A. <mark>Maple sugar</mark>
    B. Ship masts
    C. Turpentine
    D. Witch Hazel Lotion

13. **Tree C** might produce

    A. Maple Sugar
    B. <mark>Ship hulls</mark>
    C. Turpentine
    D. Soda

14. Many of the trees in the overstory in **Area D** are hardwoods. If the landowner is interested in producing timber, which of these is the best treatment for this area?

    A. Shelterwood
    B. Seed tree
    C. Pruning
    D. <mark>Crop tree release</mark>

For questions #15-17, Area E is both sides of the trail.

15. Tree species found in **Area E** that are usually **NOT** found in older forest in our region are:
    A. Oak
    B. Pine
    C. Maple
    D. Aspen

16. If the owner of the forest is considering growing softwoods in **Area E,** which silviculture treatment would facilitate this best?
    A. Group selection
    B. Single tree selection
    C. Clearcut
    D. Controlled Burn

17. If the landowner is interested in managing with wildlife in mind, particularly to encourage trees that produce hard mast, which of these species would be best to encourage in **Area E** for hard mast production?
    A. Red maple
    B. Sugar maple
    C. White oak
    D. White pine

Follow the signs to Area F, near the wetland, for questions # 18-20.

18. In **Area F**, which silviculture treatment would have the **LEAST** impact on the forested wetland?
    A. Controlled burn
    B. Overstory removal
    C. Group Selection
    D. Single tree selection

19. In **Area F**, which silviculture treatment would have the **MOST** impact on the forested wetland?
    A. Single tree selection
    B. Group Selection
    C. Seed tree
    D. Shelterwood

20. The stand of trees along the edge of **Area F**, above the wetland area, is a
    A. Native Groundlayer
    B. Riparian Buffer
    C. Shelterwood
    D. Pioneer species

Site 1: Standing Tree and Log Measurement

Use common or scientific names to fill in the blanks - or circle the one best answer choice.
Use the Tree Scale Stick and Log Scale Stick as needed for measurements.

Each correct answer is worth 2 pts.

1. Tree #1 is a   White Oak *(Quercus alba)*

2. Tree #1's dbh is: 18"   20"   22"   24"   26"

3. Tree #1's merchantable height as measured to the nearest one-half 16 foot log is:
                1   2   2-1/2   3   3-1/2

4. Tree #1's volume is _____171_____ board feet.

5. Tree #2 is a   Bigtooth Aspen *(Populus grandidentata)*

6. Tree #2's dbh is: 12"   14"   16"   18"   20"

7. Tree #2's volume is   ACCEPT 100-120   board feet.

8. Tree #3 is a Black Oak *(Quercus velutina)*

9. Tree #3 is a species most susceptible to damage from which of the following pests:
   A. Emerald Ash Borer
   B. Gypsy Moth
   C. Asian Longhorn Beetle
   D. Woolly Adelgid

10. The 8 ft. log has how many merchantable board feet? _____110_____

11. Tree #4 best fits which of the following criteria:
    A. Provides for hard mast (1" nuts), excellent for veneer when fully grown
    B. Provides for soft mast (1" berries), excellent for saw logs when fully grown
    C. Provides for soft mast (1/4" berries), excellent for softwood applications, climax species
    D. Provides for hard mast (1/4" nuts), excellent for tool handles, shade tolerant

12. Tree #5 best fits which of the following criteria:
    A. Highly adaptable species that can grow in swamps or uplands, soft mast, very common
    B. Highly specialized species requiring these environmental conditions, hard mast, rare
    C. A softwood and soft mast provider for wildlife, rarely found with single trunks, common
    D. A hardwood and hard mast provider for wildlife, very common

Site 2: Tree ID using Fruits, Bark or Leaves

Using the common names record the tree species associated with each of the displayed artifacts.

Each correct answer is worth 2 pts.

13. This is the bark of a(n) Honey Locust *(Gleditsia triacanthos)*

14. This tree fruit or cone is from a(n) Sweetgum *(Liquidambar styraciflua)*

15. This is the bark of a(n) Pitch Pine *(Pinus rigida)*

16. This twig is from a(n) American Beech *(Fagus grandifolia)* .

Site 3: Tree and Pest - Disease ID

Give common or scientific names and match the tree and its pest/disease.

(Both the tree name and the pest/disease name must be correct to earn the 2 pts.)

	Tree	*Pest/Disease*
17.	White Ash *(Fraxinus americana)*	Emerald Ash Borer *(Agrilus planipennis*)
18.	White Pine *(Pinus strobus)*	White Pine Weevil *(Pissodes strobi)*
19.	Black Locust *(Robinia pseudoacacia)*	Locust Borer *(Megacyllene robiniae)*
20.	Black Cherry *(Prunus serotina)*	Black knot fungus *(Apiosporina morbosa)*