

**OREGON ENVIROTHON 2017
FORESTRY TEST**

TEAM# _____

TEST TOTAL _____/50 points

PART 1 Tree Identification and Forest Products (10 points)

1a. Given the tree samples on the table, write in the correct **species of trees or shrubs** using **both common and scientific/Latin name**. (6 points, (.5 points each))

	Common Name (.5 point each)	Scientific Name (.5 point each)
i.)		
ii.)		
iii.)		
iv.)		
v.)		
vi.)		

_____ /6

**PART 1 Tree Identification and Forest Products
(10 points) continued**

1b. Forestland in Oregon is managed for three primary purposes. **List two of the three primary purposes that forestland is managed in Oregon?** (2 points)

1c. **List 2** of the three **major forest certification systems used in Oregon?** (2 points)

**PART 2 The Forest Practices Act and Forest Ecology
(10 points)**

Answer the following questions with respect to the Oregon Forest Practice Rules and Forest Ecology. **Fill in the blank.**

2a. The Forest Practices Act lists **three types** of streams. List the 3 types of streams. (3 points, 1 point each)

1. _____
2. _____
3. _____

2b. What is the name of the organization that oversees the Oregon Forest Practices Act and that operators have to submit “notice of operations” to? (1 point)

2c. **Define “OPERATOR”** as used in the Oregon Forest Practices Act? (1 point)

PART 2 The Forest Practices Act and Forest Ecology (10 points) cont.

2d. Define the term “Sustainable forestry”? (1 point)

2e. List two of the three subgroups of **Wood Borer insects** that impact Oregon forests.
(1 point each, 2 points total)

2f. List two types of **forest root diseases** that can impact trees in Oregon.
(1 point each, 2 points total)

 /5

PART 3 Tree Measurements (10 points)

Directions: There are four trees marked with the letters A, B, C, D and one downed log marked F. By using the tool and information specified below, answer the following questions.

3a. Using the **Woodland Stick**, what is the Diameter (DBH) of **Tree A**?

_____ (inches) (1 point)

3b. Using a **Diameter or Loggers Tape**, what is the Diameter (DBH) of **Tree B**?

_____ (inches) (1 point)

3c. Using the **Woodland Stick**, what is the total height of **Tree C** given you are **100 feet** from the base of the tree?

_____ (feet) (2 points)

3d. Using a **Clinometer**, what is the total height of **Tree D** given you are **100 feet** away from the base of the tree?

_____ (feet) (2 points)

3e. Using the diameter (DBH) measurement from **Tree B**, and the volume table on the **Woodland Stick**, determine the board foot volume of **Tree B**, for the first 40 feet of the tree?

_____ b.f. (board feet) (2 points)

3f. Using the **a combination of woodland stick and measuring tape**, determine the **board foot volume of Log F** in Scribner board feet.

_____ b.f. (board feet) (2 points)

_____/10

PART 4 Forest Succession and Growth (10 points)

4a. Using the provided tree ‘cookie’ sample, answer the following questions. (4 points, 1 point for each answer)

1. Approximately how old was this tree? _____ (1 point)

2. From the tree cookie sample, were there any indicators that this tree was stressed? **Briefly explain your answer** (1 point)

3. **Describe** a forest management activity and/or silvicultural technique that could have improved the health of this tree. (2 points)

4b. Why would a forest landowner care how fast or slow their trees are growing? (1 point)

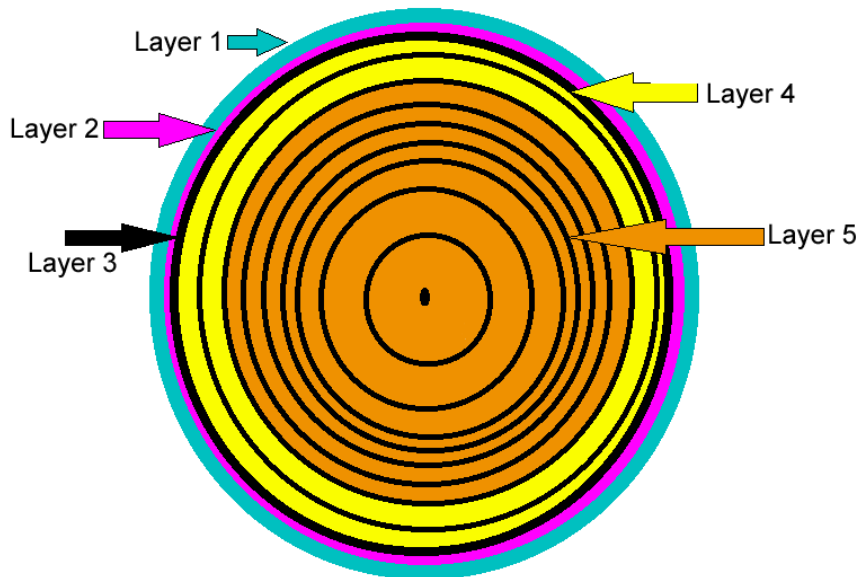
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PART 4 Forest Succession and Growth (10 points) continued

4c. Identify the points on the tree cross section (below). Write in the correct name of the part and its function. (5 points, .5 point for each answer)

	Name:	Function:
Layer 1-a)	_____	_____
Layer 2-b)	_____	_____
Layer 3-c)	_____	_____
Layer 4-d)	_____	_____
Layer 5-e)	_____	_____

Cross-section of a Tree



_____/5

PART 5 Agricultural Soil and Water Conservation (10 points)

5. More than 50% of the drinking water in the United States originates in forests. Refer to the two charts provided to answer the following questions (5 points total)

5a. **How does water filtration through our forests affect our drinking water?** (1 point)

5b. **List 4 functions of the Forest Water cycle?** (4 points)

1. _____
2. _____
3. _____
4. _____

5c. You are standing in a working forest, the Rediscovery Forest. If we were planning to do a forest harvest and remove trees, consider some of the best management practices that can be considered to minimize erosion and protect water. (5 points)

List **3 main agents of erosion** you might find in this forest and Oregon forests? (3 points, 1 point each)

5. _____
6. _____
7. _____

5d. What are **two type of activities you could do to minimize soil erosion on a newly constructed forest road?** (2 points)

1. _____
2. _____

Yay, Forests! You are done!

_____ /10