FMSO Forestry Tryout Exam

Written by Sru and Scispork

This test is in stations, and the entirety of the exam is meant to take place over a 30 minute period. This includes directions on how to rotate stations, 2.5 minutes per station, and the appropriate amount of rotation time.

Good luck.

Station 1

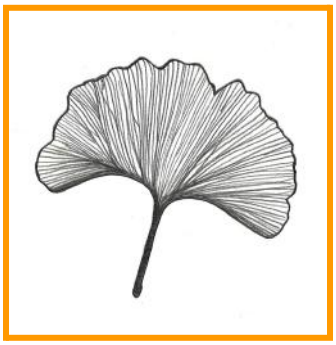
Match terms from the word bank to the correct definition. Not all terms will be used.

1. Vascular tissue that transports water and minerals into the leaf (1)
2. Vascular tissue that transports the products of photosynthesis out of the leaf (1)
3. Dense tissue in which 1 and 2 are embedded (1)
4. Consists of 1, 2, and 3 (1)
5. Primary tissue of photosynthesis (1)
6. Primary organelle of photosynthesis (1)
7. Part of leaf where stomata are located (1)

A. Sheath	E. Chlorovein	I. Xylem
B. Palisade	F. Phloem	J. Epidermis
C. Stomata	G. Vascular Bundle	K. Hydroartery
D. Mesophyll	H. Chloroplast	L. Chlorophyll

8. Write the balanced chemical equation for photosynthesis. (2)
9. Name the two groups of seed plants that divide plants by how they reproduce. (2)
10. Why do leaves change color in the fall? (1)
11. What is the difference between deciduous and evergreen trees? (2)

Station 2



Specimen A

Specimen B

12. Identify Specimen A (1)
13. What makes Specimen A unique? (2)
14. What is another name for Specimen A? (1)
15. Where in the world does Specimen A grow wild? (1)
16. True or False: this genus has only one species. (1)

17. Identity Specimen B (1)
18. Are the berries of this tree safe to eat? Explain. (2)
19. Name three uses that Native Americans used this tree for. (3)
20. State and explain the usage of this tree in modern medicinal treatment. (3)

Station 3

Specimen A

21. Identify the **taxonomic family** of Specimen A (1)
22. Fruits of a subset of this family, including the Specimen A, are commonly referred to as what? (1)
23. Name one of the two U.S. states Specimen A can be found in. (1)
24. Which U.S. city is Specimen A the official native plant of?
25. Which part(s) of Specimen A is/are poisonous? (1)
26. What compound found in Specimen A, when digested, is poisonous? (1)
27. Consuming Specimen A may help with the treatment of what disease? (1)
28. What is a perennial? Is Specimen A a perennial? (2)

Station 4

Canadian Flag

Specimen A

Specimen B

Specimen C

Specimen D

29. What GENUS is the leaf on Canada's flag? (1)
30. How does this family reproduce? (1)
31. Name two commercial/economic uses for this family (2)

32. Identity Specimen A (1)

33. Identity Specimen B (1)
34. What is the name of the part of the tree shown in Specimen E? (1)

35. Identity Specimen C (1)
36. Identity Specimen D (1)

Station 5

Specimen A

Specimen B

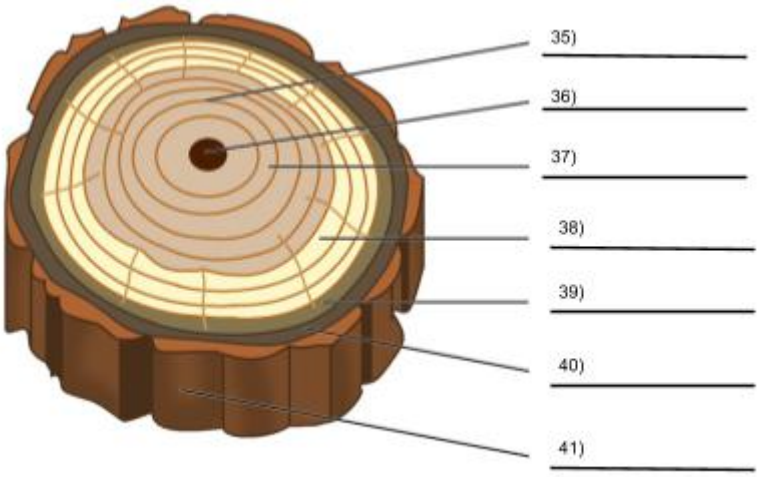
37. Identity Specimen A (1)
38. What state is Specimen A commonly found in? (1)
39. What does the species name of Specimen B mean and what language is it from? (2)

40. Identity Specimen B (1)
41. What state is Specimen B commonly found in? (1)

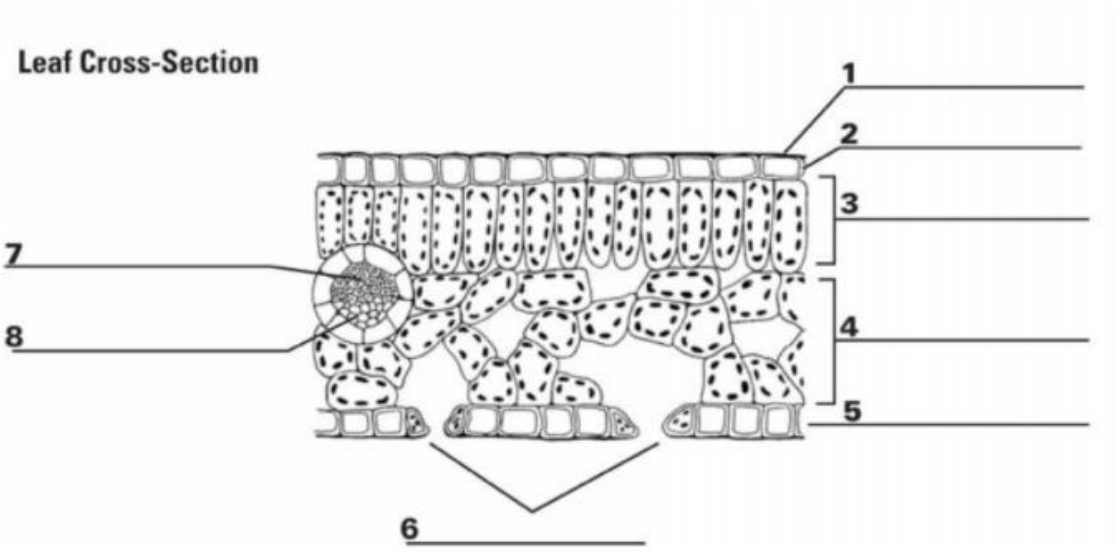
42. What is the shape and arrangement of these kinds of leaves? (1)
43. Explain how Specimen B is adaptable to wildfires (3)
44. Which part of Specimen B is edible? (1)

Station 6

Label the following diagram of a tree trunk: (7)



Label the following diagram of a leaf: (8)



Station 7

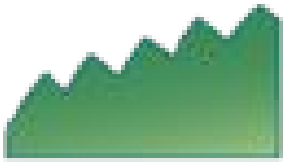
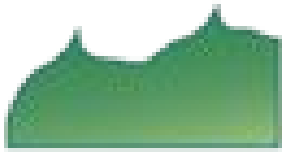
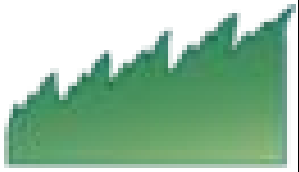
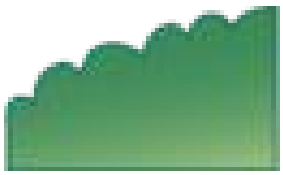
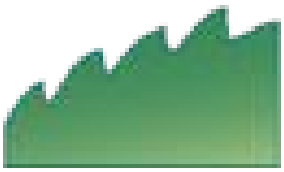
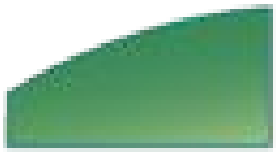
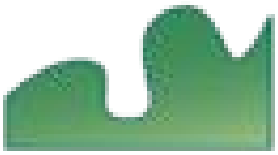
Specimen A

Specimen B

Specimen C

60. Identify Specimen A (1)
61. Identify Specimen B (1)
62. Identify Specimen C (1)
63. Which specimen is not in the same taxonomic family as the other two? (1)
64. The term “alternate” describes the leaf arrangement of which specimen(s) [Select all that apply] (1)
65. Which specimen is used extensively for lumber? (1)
66. Which specimen produces fruit that is edible when raw? (1)
67. What vein category describes all of these specimens? (2)

Station 8

			
Margin A	**Margin B**	**Margin C**	**Margin D**
			
Margin E	**Margin F**	**Margin G**	**Margin H**

68. Identify Margin A (1)
69. Identify Margin B (1)
70. Identify Margin C (1)
71. Identify Margin D (1)
72. Identify Margin E (1)
73. Identify Margin F (1)
74. Identify Margin G (1)
75. Identify Margin H (1)
76. Correctly match three species on the Tryout Tree List to any one of these margins. Each margin may only be used once. (3)
77. What is the difference between denticulate and dentate margins? (1)

Station 9

Specimen A **Specimen B**

78. Identify Specimen A (1)
79. Identify Specimen B (1)
80. What does the bottom picture of Specimen A and Specimen B depict? (2)
81. What taxonomic family are both of these specimens in? (1)
82. The extract of which specimen can be used to make an astringent? (1)
83. Give two “nicknames” that Specimen B is often referred to as. (2)
84. Why should you exercise caution when bringing Specimen A’s tree capsules into your house? (1)

Station 10

85. What is the difference between primary and secondary ecological succession? (2)
86. What is the end point of succession called? (1)
87. Will deciduous or coniferous trees typically be seen first during a succession? Why? (2)
88. What are the three types of major forest biomes? List them in order of ascending latitudes at which they are found. (4)
89. One of the most important symbiotic relationships trees form are called mycorrhizae. Describe this relationship, and identify the type of symbiosis that occurs. (2)
90. In an ecological context, what is a niche? (1)
91. A tree is classified as a _____ [Select all correct answers] (2)
    a. Heterotroph
    b. Autotroph
    c. Photoautotroph
    d. Chemolithoautotroph
    e. Consumer
    f. Producer
92. What is a tree? [Funny answers only!] (1)