

Station 1

1. (1 point) _____ **Vascular cambium** _____
2. (1 point) _____ **secondary growth** _____
3. (4 points)

Solution: caused by ethylene when the shoot encounters an obstacle. Increased lateral growth, slowed primary growth, and epicotyl tilts

4. (1 point) _____ **Monoecious** _____
5. (1 point)

Solution: Prevents self pollination because wind is unlikely to blow straight up

6. (2 points) _____ **sporophyte** _____ **alternation of generations** _____
7. (3 points) _____ **ovule** _____ **7** _____

Station 2

8. (1 point) True **False**
9. (1 point) _____ **Ash** _____
10. (1 point) _____ **India** _____
11. (2 points) _____ **General Sherman** _____
12. (1 point) True **False**
13. (1 point) _____ **Silvology** _____

14. (1 point)

Solution: needs to discuss how there are layers glued together

15. (3 points)

Solution: needs a substantial response involving some of the following: removes low-growing underbrush, cleans the forest floor of debris, opens it up to sunlight, and nourishes the soil

Station 3

16. (1 point) _____ **Sassafras albidum** _____

17. (2 points) A. B. C. **D.**

18. (1 point) _____ **April through May** _____

19. (1 point) A. **B.** C. D.

20. (2 points) _____ **Natural brown paint/dye** _____

21. (2 points) **A.** B. C. D.

Station 4

22. (1 point) _____ **Water/Red Birch** _____

23. (1 point) _____ **Betula Occidentalis** _____

24. (1 point) _____ **Birch** _____

25. (2 points) _____ **glaborous or thinly hairy** _____

26. (1 point) _____ **February to June** _____

27. (3 points)

Solution: should reference winged nature, spinning to the ground, or something along those lines

28. (3 points)

Solution: description should cover some of "a slim, cylindrical flower cluster (a spike), with inconspicuous or no petals, usually wind-pollinated (anemophilous) but sometimes insect-pollinated (as in Salix). They contain many, usually unisexual flowers, arranged closely along a central stem that is often drooping"

Station 5

29. (2 points) Ulmaceae; Celtis occidentalis, Ulmus americana, Ulmus rubra

30. (1 point) Apocarpous

31. (1 point) **A.** B. C. **D.**

32. (4 points)

Solution: If the flower has an inflexed stamen, then pollen is released and distributed by wind dispersal; however, if the stamen is straight, then insect pollination is most likely to occur

33. (1 point) weevil

34. (1 point) A. **B.** C. D.

35. (3 points)

Solution: Annonaceae , Asimina triloba (Pawpaw)

Station 6

36. (1 point) _____ **Bald Cypress**

37. (1 point) True **False**

38. (1 point) _____ **Brown**

39. (1 point) _____ **Water/rivers**

40. (1 point) True **False**

Station 7

41. (1 point) _____ **Nyssa sylvatica**

42. (1 point) A. **B.** C. D.

43. (1 point) A. B. C. **D.**

44. (1 point) _____ **Water pipes**

45. (1 point) _____ **Alligator**

Station 8

46. (1 point) _____ **Sugar Maple**

47. (1 point) _____ **Acer saccharum**

48. (1 point) A. B. **C.** D.

49. (1 point) _____ **White-tailed deer, moose, porcupine, squirrels, snowshoe hare**

50. (1 point) True **False**

Station 9

51. (1 point) _____ **Ginkgo** _____
52. (1 point) _____ **Ginkgo biloba** _____
53. (1 point) _____ **Bartheletia paradoxa** _____
54. (1 point) **A.** B. C. D.
55. (1 point) _____ **Dichotomous venation** _____
56. (1 point) A. **B.** C. D.

Station 10

57. (1 point) _____ **Taxus brevifolia** _____
58. (1 point) _____ **Taxaceae** _____
59. (1 point) A. B. **C.** D.
60. (2 points) _____ **Paclitaxel** _____ **cancer** _____
61. (1 point) _____ **40** _____
62. (1 point) _____ **Nitrogen** _____
63. (1 point) A. B. C. D. **E.**

Station 11

64. (1 point) _____ **Quaking aspen** _____
65. (1 point) _____ **Populus tremuloides** _____
66. (1 point) A. B. **C.** D.
67. (1 point) A. B. C. **D.**
68. (1 point) **A.** B. C. D. E. F.

Station 12

69. (1 point) _____ **Sorbus americana** _____

70. (3 points)

Solution: Needs a substantial response about $i=1$ of these: seeds light brown, oblong, compressed; cotyledons fleshy

71. (1 point) _____ **Winter** _____

72. (2 points)

Solution: Must describe "A flower cluster with a central stem bearing a single terminal flower that develops first, the other flowers in the cluster developing as terminal buds of lateral stems."

73. (2 points)

Solution: No. They are reportedly poisonous. Eating large amounts can cause stomach irritation and pain, vomiting, queasiness, diarrhea, kidney damage, and other side effects.

74. (1 point) _____ **Alternate** _____

75. (1 point) True **False**

Station 13

76. (1 point) _____ **American Holly** _____

77. (1 point) _____ **Ilex Opaca** _____

78. (1 point) **A.** B. C. D.

79. (1 point) A. B. **C.** D.

80. (1 point) A. **B.** C. D.

Station 14

81. (1 point) _____ **Longleaf Pine** _____

82. (1 point) _____ **18 in** _____

83. (2 points)

Solution: pyrophytic; must say thick bark or growth habits for second half

84. (2 points)

**Solution: Here's to the land of the long leaf pine,
The summer land where the sun doth shine,
Where the weak grow strong and the strong grow great,
Here's to "Down Home," the Old North State!**

85. (1 point) True False

Station 15

86. (1 point) True False

87. (1 point) True False

88. (1 point) True False

89. (1 point) True False

90. (1 point) True False

91. (1 point) _____ **Resin blister**

92. (1 point) _____ **Eastern Spruce**

93. (2 points)

Solution: Yes, when they die

94. (2 points)

Solution: Strand where at least 80% of individuals are of one species

95. (1 point)

Solution: they can proliferate and grow even in shade

Station 16

96. (1 point) _____ **Tanoak** _____
97. (1 point) _____ **Bur Oak** _____
98. (1 point) _____ **American Chestnut** _____
99. (1 point) _____ **American Beech** _____
100. (1 point) _____ **California Black Oak** _____
101. (1 point) _____ **Chinkapin Oak** _____
102. (1 point) _____ **Shingle Oak** _____

Station 17

103. (1 point) _____ **Swamp White Oak** _____
104. (1 point) _____ **Autumn** _____
105. (1 point) _____ **Thor** _____
106. (1 point) _____ **3-5 years** _____
107. (1 point) _____ **20 years** _____
108. (1 point) _____ **300 years** _____
109. (1 point) _____ **Quercus bicolor** _____

Station 18

110. (1 point) _____ **Blue Paloverde** _____

111. (1 point) _____ **Arizona** _____

112. (2 points)

Solution: sheds leafs during droughts and grows leaves after rainfall

113. (1 point) True **False**

114. (1 point) **True** False

115. (1 point) _____ **33-39 feet** _____

116. (1 point) _____ **8-11** _____

Station 19

117. (1 point) _____ **Grand Fir** _____

118. (1 point) _____ **Abies grandis** _____

119. (1 point) _____ **7.5** _____

120. (3 points)

Solution: living or dead plant material that allows fires to climb from the ground to the canopy

121. (1 point) _____ **Crown fires** _____

122. (1 point) **True** False

123. (1 point) A. B. **C.** D.