**-Write down all your answers clearly on the examination sheets.**

Sample A

**-Put also all the answers of Section I, II, and III on Scantron.**

**-Turn in both your exam sheets and Scantron when you are done.**

**-The full score is 100. The total time is 50 minutes.**

1. **True/False. (30 points).** Place a “T” or “F” in the blanks below to indicate whether the statement is true or false. On Scantron, mark “A” for true and “B” for false.

1.\_\_\_\_. *Magnolia grandiflora* is evergreen.

2.\_\_\_\_. Pacific yew has a rapid growth rate.

3.\_\_\_\_. *Platanus occidentalis* is native to the east coast.

4.\_\_\_\_. The cones red spruce are quite long, between 6 and 8” in length.

5.\_\_\_\_. Douglas-fir is not a true fir.

6.\_\_\_\_. Red pine is considered a hard pine.

7.\_\_\_\_. The branches of northern white-cedar can take root if the tree falls.

8.\_\_\_\_. *Abies grandis* is native to the southeastern United States.

9.\_\_\_\_. *Pinus resinosa* is native along the Gulf coast.

10.\_\_\_\_. *Larix laricina* is an evergreen conifer.

11.\_\_\_\_. Sweetgum is the most common and widely distributed tree in the Mississippi delta.

12.\_\_\_\_. The twigs of slippery elm are thinner than those of American elm.

13.\_\_\_\_. *Quercus rubra* is the most important and widespread of northern oaks.

14.\_\_\_\_. White spruce is intolerant of shade.

15.\_\_\_\_. The needles of baldcypress are two-ranked.

16.\_\_\_\_. Southern magnolia is a nonnative, invasive species in the southeastern U.S.

17.\_\_\_\_. The timber of black oak is sold as red oak.

18.\_\_\_\_. *Thuja plicata* is native to West Virginia and Pennsylvania.

19.\_\_\_\_. The fruit of bur oak has a fringed cap.

20.\_\_\_\_. Yellow birch has a terminal bud.

21.\_\_\_\_. Redwood grows in the fog belt.

22.\_\_\_\_. *Betula papyrifera* is the most widely distributed of the native birches.

23.\_\_\_\_. Red alder is native to Guatemala.

24.\_\_\_\_. *Magnolia acuminata* is deciduous.

25.\_\_\_\_. The twigs of quaking aspen are grey in color.

26.\_\_\_\_. Virginia pine is used for reclamation.

27.\_\_\_\_. The cones of *Thuja plicata* hang downwards.

28.\_\_\_\_. The cones of *Abies* point upward.

29.\_\_\_\_. The firs discussed in lecture are commonly seen growing in the forests of West Virginia.

30.\_\_\_\_. The timber of *Tsuga heterophylla* is sold as “hem/spruce”.

**II. Multiple choice.**  **(20 points)** Choose only one correct answer, write down your answers below and on the Scantron, 20 points.

31.\_\_\_\_. The fruits of eastern *Tsuga heterophylla* are: **A**. small purple berries, **B.** blue colored berries, **C**. red drupes, **D**. light brown colored cones.

32.\_\_\_\_. The fruits of *Paulownia tomentosa*: **A**. are woody capsules, **B**. are orange berries, **C**. are small cones, **D**. are blue drupes.

33.\_\_\_\_. The bark of western redcedar: **A**. is deeply ridged and furrowed, **B**. is fibrous, **C.** is smooth and shiny, **D**. is covered in resin blisters.

34.\_\_\_\_. Incense-cedar: **A**. has duck bill like cones, **B**. is native to the northeastern U.S., **C.** has small upward facing cones, **D.** has glaucous, purplish cones.

35.\_\_\_\_. Which of the following species is NOT in the Pinaceae family? **A**. *Taxus brevifolia*, **B**. *Tsuga heterophylla*, **C**. *Larix laricina*, **D**. *Abies procera*.

36.\_\_\_\_. Bush honeysuckles: **A**. are ok to leave growing on lands that you manage, B. are native to South America, **C**. have opposite leaves, **D**. have fruits that are small legumes.

37.\_\_\_\_. Loblolly pine: **A**. is a small pine native to Central Appalachia, **B**. has a slow growth rate, **C**. is considered a soft pine, **D**. is the leading commercial timber tree in the southeast.

38. \_\_\_\_. Pacific yew: **A**. has needles that are in fascicles of 2, **B*.*** is a large sized tree, reaching heights of 100 to 130 feet, **C**. prefers dry sites, **D**. is a source of Taxol for chemotherapy.

39.\_\_\_\_. Incense-cedar is in the \_\_\_\_\_\_ genus: **A**. *Tsuga*, **B**. *Calocedrus*, **C**. *Thuja*, **D**. *Juniperus*.

40.\_\_\_. The bark of redwood: **A**. is smooth and gray, **B**. is white and deeply furrowed, **C**. fibrous and up to 1 foot thick, **D**. covered in corky warts and ridges.

41.\_\_\_. The fruit of *Liquidambar styraciflua*: **A**. is a head of strongly beaked capsules, **B**. a brown berry, **C**. a yellowish brown cone, **D**. an aggregate of samaras.

42.\_\_\_. The cones of giant sequoia: **A**. are 8” to 12” in length, **B**. have peltate scales, **C**. are bright yellow in color, **D**. have a blue aril surrounding the seed.

43.\_\_\_. Which of the following species is in the Fagaceae family?: **A**. *Alnus rubra*, **B**. *Ostrya virginiana*, **C**. *Lithocarpus densiflorus*, **D**. *Tilia Americana.*

44.\_\_\_. The fruit of ginkgo: **A**. has a foul odor when ripe, **B**. is a large brown cone, **C**. is a yellow berry, **D**. has peltate scales.

45.\_\_\_. The fruit of American sycamore: **A**. is a woody capsule, **B**. is a fused, aggregate of achenes, **C**. is a brown berry, **D**. is an aggregate of samaras.

46.\_\_\_. *Calocedrus decurrens*: **A**. is native to swamps in the southeastern U.S., **B**. has a pinnately compound leaf, **C**. is native to the western U.S., **D**. is native to the Great Lakes states.

47.\_\_\_. Yellow-poplar: A. has a rapid growth rate, B. is very tolerant of shade, C. has a very slow growth rate, D. is in the Salicaceae family.

48.\_\_\_. The genus *Abies* is in the: **A**. the Cupressaceae family, **B**. the Taxodiaceae family, **C**. Abeaceae family, **D**. Pinaceae family.

49.\_\_\_. *Taxus brevifolia*: **A**. is native to the mountains of West Virginia, **B**. is native to the state of Texas, **C**. is native to the Pacific northwest, **D**. is native to the Canadian province of New Brunswick.

50.\_\_\_. Pecan: **A**. is a species of hickory, **B**. is in the Fagaceae family, **C**. is in the Betulaceae family, **D**. is native primarily to the northeastern United States.

**III.** **Matching.** **(50 points)** Place the letter of the best match from the right-hand list in the blank next to the item in the left-hand list below. Write down your answers below and also on the Scantron.

**3.1**

\_\_\_\_\_\_\_\_ 51. scarlet aril A. willow oak

\_\_\_\_\_\_\_\_ 52. mustard yellow buds B. seed of Pacific yew

\_\_\_\_\_\_\_\_ 53. *Pinus palustris* C. *Sequoiadendron giganteum*

\_\_\_\_\_\_\_\_ 54. *Quercus phellos* D. *Carya cordiformis*

\_\_\_\_\_\_\_\_ 55.world’s largest tree E. 3 years in grass stage

**3.2**

\_\_\_\_\_\_\_\_ 56. *Taxodium distichum*  A*. Rhus typhina*

\_\_\_\_\_\_\_\_ 57. staghorn sumac B. *Sassafras albidum*

\_\_\_\_\_\_\_\_ 58. safrole C. cypress knee

\_\_\_\_\_\_\_\_59. Douglas-fir D. most important commercial timber tree

in canada

\_\_\_\_\_\_\_ 60. white spruce E. *wa ‘ kaulua*

**3.3**

\_\_\_\_\_\_\_ 61. red spruce A. tallest trees on earth

\_\_\_\_\_\_\_ 62. redwood  B. spruce that was discussed, that is native

only to the eastern U.S.

\_\_\_\_\_\_\_ 63. white oak group C. aggregate of samaras

\_\_\_\_\_\_\_ 64. yellow-poplar D. also called arborvitae

\_\_\_\_\_\_\_ 65. northern white-cedar E. tyloses

**3.4**

\_\_\_\_\_\_\_ 66. American sycamore A. pink to purple flowers, invasive

\_\_\_\_\_\_\_ 67. *Paulownia tomentosa* B. most important hardwood in the Pacific

northwest

\_\_\_\_\_\_\_ 68. Betulaceae family C. pencil stock

\_\_\_\_\_\_\_ 69. *Alnus rubra*  D. also called buttonwod

\_\_\_\_\_\_\_ 70. *Calocedrus decurrens* E. *Corylus*

**3.5**

\_\_\_\_\_\_\_ 71. once used for making baskets A. suction cup like base

\_\_\_\_\_\_\_ 72. *Pinus taeda* B. protection of high altitude watersheds

\_\_\_\_\_\_\_ 73. *Larix occidentalis* C. *Salix nigra*

\_\_\_\_\_\_\_ 74. *Abies* D. loblolly pine

\_\_\_\_\_\_\_ 75. *Pinus elliottii* E. fastest growing of all the southern pines

**IV.** **Bonus Questions**. (2 points each) Write your answers below.

1. In lecture, one tree that survived a nuclear bomb blast and consequent radiation poisoning was discussed. This tree is a \_\_\_\_\_\_\_\_\_\_\_ (give the common or scientific name of the species). In which country is this tree located? \_\_\_\_\_\_\_\_\_

2. People from Islands of \_\_\_\_\_\_\_\_\_\_\_\_ made W’akaulua using drift wood from \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ species (given the scientific name).