

## Practice test FFA Forestry CDE

Questions for each category will be taken from the sections of the books as noted in that category.

### I: Vocabulary

Science of Forestry Management (SFM) pages 71-76; Intro to Forestry Science (IFS) pages 478-494

1. \_\_\_\_\_ triangular leaf shape
  - a. Acicular
  - b. Obovate
  - c. **Deltiod**
  - d. Cordate
2. \_\_\_\_\_ a wing-shaped fruit
  - a. **Samara**
  - b. Pome
  - c. Legume
  - d. Capsule
3. \_\_\_\_\_ a woody tissue that conducts water, nutrients, and plant materials from the roots to the stems and leaves
  - a. Cambium
  - b. **Xylem**
  - c. Bole
  - d. Heartwood
4. \_\_\_\_\_ a type of disease that occurs in trees as fungi break down the cellulose and lignin components of the cell walls
  - a. **White rot**
  - b. Heart rot
  - c. Root rot
  - d. Brown rot
5. \_\_\_\_\_ a measurement of timber volume that may be determined for a single tree or an entire forest
  - a. Timber yield
  - b. Timber product inventory
  - c. **Basal area**
  - d. Board foot volume
6. \_\_\_\_\_ a harvest method in which all of the trees in the stand are cut at the same time
  - a. Selection cutting
  - b. Logging
  - c. Stand improvement
  - d. **Clear cutting**
7. \_\_\_\_\_ a reconstituted board containing a high percentage of wood shaving in the central core with layers of wood flakes on either side of the core and fine sawdust near the surface
  - a. **Particleboard**
  - b. OSB
  - c. Fiberboard
  - d. Hardboard
8. \_\_\_\_\_ erratic behavior by a crown fire
  - a. **Firestorm**
  - b. Blowup
  - c. Draft
  - d. Backfire
9. \_\_\_\_\_ a form of asexual reproduction of a forest in which all of the trees are cut and new forest growth is generated from the stumps
  - a. Seed tree method
  - b. Shelterwood method
  - c. **Coppice method**
  - d. Tissue culture method

10. \_\_\_\_ half of a replicated chromosome  
a. Lipids  
b. Centromere  
c. Centrioles  
**d. Chromatid**
11. \_\_\_\_ growth resulting in increased diameter in a tree  
a. Terminal growth  
**b. Radial growth**  
c. Secondary growth  
d. Primary growth
12. \_\_\_\_ the east west location of a township from a principal meridian  
a. Range  
b. Township  
c. Section  
d. Longitude

## II. Tools, Equipment and Chainsaw

SFM Section F; IFS none; Husqvarna working with Chainsaws

13. Which of the following tools is used to determine the thickness of bark?  
a. **Bark gauge**  
b. Increment borer  
c. Biltmore stick  
d. Log rule
14. Which of the following tools is used to determine the diameter of trees?  
a. Diameter tape  
b. Biltmore stick  
c. Relaskop  
**d. All of the above**
15. What are two ways to mark trees?  
a. Notching, Posting  
**b. Flagging, Painting**  
c. Notching, Flagging  
d. Notching, Painting
16. Which tool is used to move a log by hand?  
a. Boom loader  
b. Skidder  
**c. Cant hook**  
d. Grapple
17. Which of the following IS NOT considered a felling tool?  
a. **Dibble bar**  
b. Foot breaking bar  
c. Impact bar  
d. Winch
18. What are wedges made of?  
a. Steel, plastic  
**b. Plastic, aluminum**  
c. Wood, aluminum  
d. Steel, wood

19. Which of the following determines the fall of the tree?
- Felling cut
  - Hinge
  - Directional notch**
  - Lean of the tree
20. In relation to the tree where should the escape path be?
- About a 45 degree angle and opposite the planned direction of the fall**
  - About a 55 degree angle and opposite the planned direction of the fall
  - About a 90 degree angle and opposite the planned direction of the fall
  - Any degree as long it is opposite the planned direction of the fall

### III. Forest Industry, Environment, and Uses

SFM Section B, C, D; IFS Chapters 5, 7, 11, 15

21. Timberlands are defined as:
- Private forest lands
  - Commercial forest lands**
  - Both commercial and private forest lands
  - Federal forest lands
22. Of all the commercial forest land in the US, private land owners account for what percent?
- 15
  - 28
  - 57**
  - 75
23. Forestry is defined as
- Science of managing forests
  - Production of high yield forests
  - Production of high quality forest products and services
  - All of the above**
24. The source of all energy used by plants and animals is:
- Water
  - Sunlight
  - Soil**
  - Air
25. Forest management in colonial times could best be described as forest:
- Conservation
  - Exploitation**
  - Dominant-use management
  - Preservation
26. Which of the following elements is NOT required in order for a forest fire to occur?
- Heat energy
  - A supply of oxygen
  - Fuel
  - Humidity**
27. A forest planting consisting of a single variety of tree is called a:
- Plantation
  - Monoculture**
  - Nursery
  - Silviculture

28. Habitat manipulation is an effective way of:

- a. Reducing the number of species
- b. Attracting wildlife
- c. Long term species management
- d. **All of the above**

29. Which of the following is NOT true about debris in streams?

- a. **They influence the streamside edge management**
- b. They influence the routing of the stream
- c. They influence the storage of sediment
- d. The increase the quality of habitat

#### IV. Silviculture and Forest Inventories

SFM Section G, I ; IFS Chapters 8, 9

30. What is the cheapest way to remove residual vegetation?

- a. Mechanical
- b. Chemical
- c. **Prescribed burning**
- d. Herbicide

31. Which thinning practice removes trees with small crowns?

- a. Row thinning
- b. Crown thinning
- c. Pre-commercial thinning
- d. **Low thinning**

32. These types of maps represent the land's shape and elevation.

- a. Relief
- b. **Topographic**
- c. Physical
- d. Orthophoto

33. What does DBH stand for?

- a. **Diameter at breast height**
- b. Diameter at base height
- c. Diameter at best height
- d. None of the above

34. The art and science of tree production is known as:

- a. Silvics
- b. Forest regeneration
- c. **Silviculture**
- d. Forestry

35. The standard of measurement that is used to express biomass production is:

- a. Cubic feet
- b. Board feet
- c. Cubic meters
- d. **Net weight**

36. Each section of land has a surface area of approximately how many acres?

- a. **640**
- b. 320
- c. 160
- d. 40

#### V. Classification and Study of Trees, Forest Products

SFM Section none ; IFS Chapters 3, 4

37. Energy from sunlight is captured and stored in plant tissues through the process of:

- a. Meiosis
- b. Photosynthesis**
- c. Dehydration synthesis
- d. Mitosis

38. The fats, oils, and waxes that are found in plants are found mostly in:

- a. Cellulose
- b. Starch
- c. Seeds**
- d. Lignin

39. Phloem is a conductive tissue that includes which of the following types of structures?

- a. Sieve tube**
- b. Tracheid
- c. Vessel element
- d. Sclerenchyma

40. A male flower part in which pollen grains develop and mature is the:

- a. Filament
- b. Anther**
- c. Stigma
- d. Sepal

41. A female flower part in which the seed forms is the:

- a. Ovule**
- b. Stamen
- c. Receptacle
- d. Style

## VI. Forest Products

SFM Section none ; IFS Chapters 13, 14

42. Which of the following is a distinguishing visual feature of hardwoods?

- a. Pores**
- b. Resin ducts
- c. Density
- d. Odor

43. Which of the following is distinguishing feature of a softwood?

- a. Pores
- b. Color
- c. Resin ducts**
- d. Heartwood

44. Which of the following produces the hottest flame when it is burned?

- a. Hardwood
- b. Softwood
- c. Charcoal**
- d. Biomass

45. A machine that is used to reduce recycled paper to pulp is the:

- a. Fourdrinier
- b. Stone grinder
- c. Disk refiner
- d. Hydropulper**

46. A condition that occurs as green lumber dries unevenly, resulting in distorted shapes in the wood, is known as:

- a. Lamination
- b. Asymmetry
- c. Symmetry
- d. Warp

## VII. Forest Disorders, Safety in the Forest

SFM Section Section K; IFS Chapter 6

47. What sickness is caused from tick bites?

- a. Tick fever
- b. Lock jaw
- c. **Lyme disease**
- d. All of the above

48. A fruiting body is:

- a. **A structure that produces spores that develop into fungi**
- b. A fleshy structure that surrounds the seeds of a plant
- c. A thin strand of fungal tissue that enters tree roots, infecting them with disease organisms
- d. A structure on a tree leaf in which sap becomes fermented to produce honeydew

49. To which of the following types of destructive forest insects does the scale insect belong?

- a. **Sucking insect**
- b. Defoliator
- c. Wood borer
- d. Root feeder

50. Which of the following animals is not classed as a rodent?

- a. Gopher
- b. **Mink**
- c. Mouse
- d. Porcupine