

2024 Maple CDE Exam  
Lake Erie Maple Expo

1. \_\_\_\_ Which state consistently produces the most maple syrup in the United States?
  - a. Vermont
  - b. Pennsylvania
  - c. Maine
  - d. New York
  
2. \_\_\_\_ What is the distinctive fruit of the maple group called?
  - a. Samaras
  - b. Acorns
  - c. Cones
  - d. Berries
  
3. \_\_\_\_ What is the minimum sugar content required for maple syrup to meet the legal definition?
  - a. 56 brix
  - b. 66 brix
  - c. 76 brix
  - d. 86 brix
  
4. \_\_\_\_ At what temperature should syrup be bottled?
  - a. 150-160°F
  - b. 170-180°F
  - c. 180-190°F
  - d. 200-210°F
  
5. \_\_\_\_ What tool is used to determine the sugar content of sap?
  - a. Hydrometer
  - b. Thermometer
  - c. Filter press
  - d. Vacuum system
  
6. \_\_\_\_ Which maple tree species typically produces sap with a high sugar content?
  - a. Sugar maple
  - b. Red maple
  - c. Silver maple
  - d. Norway maple
  
7. \_\_\_\_ What tool is recommended for sugarmakers to use for checking syrup density?
  - a. Hydrometer
  - b. Refractometer
  - c. Barometer
  - d. Thermometer

8. \_\_\_\_\_ What is the correct angle to drill the tap hole?
- a. Slight upward angle
  - b. Straight angle
  - c. Downward angle
  - d. Horizontal angle
9. \_\_\_\_\_ What is the ideal temperature for syrup to reach proper density?
- a. 200 degrees F
  - b. 212 degrees F
  - c. 219 degrees F
  - d. 225 degrees F
10. \_\_\_\_\_ What is the recommended storage condition for canned syrup?
- a. In a warm place
  - b. In a cool, dry location
  - c. In direct sunlight
  - d. Near a heat source
11. \_\_\_\_\_ What are the three classifications of U.S. Grade A syrup according to the USDA?
- a. Light amber, medium amber, dark amber
  - b. Light amber, dark amber, extra dark amber
  - c. Medium amber, dark amber, extra dark amber
  - d. Light amber, medium amber, extra dark amber
12. \_\_\_\_\_ What is the main challenge in identifying trees by trunk bark alone?
- a. Bark is the same for all trees.
  - b. Bark varies with tree growth and soil conditions.
  - c. Bark is always wet and slippery.
  - d. Bark is too thick to examine.
13. \_\_\_\_\_ What should be done to syrup when it has reached its proper temperature and density?
- a. Allow it to cool slowly to avoid crystallization
  - b. Pour it directly into storage containers without filtering
  - c. Filter it to remove sugar sand and other impurities
  - d. Add additional sugar to increase sweetness
14. \_\_\_\_\_ Which of the following is NOT an important principle for managing a sugarbush to produce sap?
- a. Making sure certain plants get sunlight to help trees produce sap
  - b. Understanding that trees grow, age, and react to things in their environment
  - c. Giving trees enough space as they grow larger to prevent crowding
  - d. Moving trees around to give them space as they grow

15. \_\_\_\_ Under normal conditions, between what ages will a maple tree likely have reduced production?
- 50 and 100 years
  - 100 and 150 years
  - 150 and 250 years
  - 250 and 350 years
16. \_\_\_\_ Why is it recommended to have a mix of tree species in a sugarbush?
- It prevents trees from growing too large.
  - It makes the sugarbush healthier and more resistant to stresses like insect damage.
  - It ensures only maple trees are productive.
  - It allows producers to avoid cutting any maple trees.
17. \_\_\_\_ What is the best way to handle trees killed by a non-native pest, such as the Asian Long-horned Beetle?
- Leave the tree as it is, since the pest will die with it
  - Burn, bury, or chip the tree to prevent the pest from spreading
  - Transport the tree out of the area as firewood
  - Wait until the next cycle of the pest begins to remove the tree
18. \_\_\_\_ What should be done to tap holes from previous years?
- Plug them to prevent sap leakage
  - Move them at least six - twelve inches above or below
  - Keep using them as long as they are not damaged
  - Drill new holes close to the old ones
19. \_\_\_\_ What is the main factor that affects sap production and sugar content?
- Soil fertility
  - Barometric pressure
  - Tree species
  - Weather conditions
20. \_\_\_\_ What is the sap collected from sugar maple trees primarily composed of?
- 98% water and 2% sugar
  - 90% water and 10% sugar
  - 80% water and 20% sugar
  - 50% water and 50% sugar
21. \_\_\_\_ How many taps can a tree have if its diameter at breast height is 20 inches?
- 1 tap
  - 2 taps
  - 3 taps
  - 4 taps

22. \_\_\_\_\_ Which of the following characteristics is NOT a required quality standard for Pure Maple Syrup?
- Color
  - Density
  - Viscosity
  - Flavor
23. \_\_\_\_\_ Which grade of maple syrup is typically produced at the beginning of the season?
- Amber Color with Rich Taste
  - Dark Color with Robust Taste
  - Very Dark Color with Strong Taste
  - Golden Color with Delicate Taste
24. \_\_\_\_\_ Which grade of syrup is the most versatile syrup with a full maple flavor that works well in food items like salad dressings?
- Very Dark Color with Strong Taste
  - Amber Color with Rich Taste
  - Dark Color with Robust Taste
  - Golden Color with Delicate Taste
25. \_\_\_\_\_ Which grade of maple syrup is typically produced at the end of the season and has a very strong maple flavor. It is excellent for cooking or baking.
- Very Dark Color with Strong Taste
  - Amber Color with Rich Taste
  - Dark Color with Robust Taste
  - Golden Color with Delicate Taste
26. \_\_\_\_\_ What is the primary cause of cloudiness in unfiltered maple syrup?
- The presence of dissolved sugars
  - Sugar sand, which is a mineral precipitate
  - Excessive boiling temperature during evaporation
  - Mold forming in the syrup after it's stored
27. \_\_\_\_\_ What can maple syrup be made into besides syrup?
- Maple candy
  - Maple cotton candy
  - Maple jelly
  - All of the above
28. \_\_\_\_\_ Pure maple syrup and other maple products have additives and artificial colors.
- True
  - False

29. \_\_\_\_\_ What is the advantage of using a vacuum system in sap collection?
- It increases sap production**
  - It reduces wildlife interference
  - It eliminates the need for tubing
  - It improves syrup quality.
30. \_\_\_\_\_ How can maples be distinguished from other trees?
- By their compound leaves
  - By their opposite arrangement of buds, leaves, and twigs**
  - By their serrated leaf margins
  - By their drooping leaf edges and tips
31. \_\_\_\_\_ A local store purchased 50 quarts of Grade A Dark syrup at \$15.00 per quart and 30 quarts of Grade A Golden syrup at \$12.00 per quart, with a 5% discount for buying over 75 quarts in total. What is the final total after applying the discount?
- \$1,110.00
  - \$1,165.50
  - \$1,054.50**
  - \$1,112.25
32. \_\_\_\_\_ If you collect 40 gallons of sap with a sugar content of 2.5% and use a 40:1 ratio for sap-to-syrup conversion, approximately how much syrup will you produce?
- 0.5 gallons
  - 1 gallon**
  - 2 gallons
  - 4 gallons
33. \_\_\_\_\_ At a farmers' market, you sold 30 half-pints at \$8.00 each and 10 quarts at \$25.00 each. If it costs \$3.00 to produce each half-pint and \$10.00 to produce each quart, what was your total profit?
- \$250
  - \$300**
  - \$340
  - \$370
34. \_\_\_\_\_ In a sugarbush with 80 trees, 30 trees are over 18 inches in diameter, and 50 trees are between 10-18 inches. If the recommended tapping density is 2 taps for trees over 18 inches and 1 tap for trees between 10-18 inches, what is the maximum number of taps you should use?
- 110 taps**
  - 80 taps
  - 130 taps
  - 100 taps

35. \_\_\_\_ You have 10 gallons of syrup. If you want to bottle half of it in pints, a quarter in quarts, and the remaining quarter in half-gallons, how many pints, quarts, and half-gallons will you need?
- a. 40 pints, 10 quarts, 5 half-gallons
  - b. 20 pints, 5 quarts, 10 half-gallons
  - c. 30 pints, 15 quarts, 5 half-gallons
  - d. 50 pints, 10 quarts, 4 half-gallons
36. \_\_\_\_ If a store receives a 5% discount for buying more than 75 quarts, how much will they save on a total of \$1,200?
- a. \$50
  - b. \$60
  - c. \$75
  - d. \$120
37. \_\_\_\_ If you sell syrup in half-pints for \$8.00 and in quarts for \$25.00, and you sell 15 half-pints and 8 quarts, what is your total revenue?
- a. \$320
  - b. \$360
  - c. \$395
  - d. \$425
38. \_\_\_\_ If it costs \$3 to produce each half-pint and \$10 per quart, what is the total production cost of 30 half-pints and 15 quarts?
- a. \$210
  - b. \$240
  - c. \$330
  - d. \$390
39. \_\_\_\_ If 30 trees are over 18 inches in diameter and can take 2 taps each, while 50 smaller trees can only take 1 tap, how many taps are assigned to the trees over 18 inches?
- a. 30 taps
  - b. 40 taps
  - c. 50 taps
  - d. 60 taps
40. \_\_\_\_ If you have 5 gallons of syrup and want to bottle all of it in pints, how many pints will you have?
- a. 10 pints
  - b. 20 pints
  - c. 40 pints
  - d. 60 pints

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