Oklahoma State University
FFA Interscholastic Meet
Horticulture General Knowledge Exam
April 26, 1997

points

KEY TO ANSWERS:

1  2  3  4  5
A  B  C  D  E

MULTIPLE CHOICE: Each correct answer adds five points to your score. Darken the circled number on the answer sheet corresponding to your answer for each question.

1. *Euphorbia* is a
   A. genus.
   B. species.
   C. variety.
   D. All of the above.
   E. None of the above.

2. Given 3 cu. yds. of vermiculite, you are to mix vermiculite and perlite in a 3:2 ratio. How much perlite, in cu. ft., will you need?
   A. 27 cu. ft.
   B. 54 cu. ft.
   C. 81 cu. ft.
   D. All of the above.
   E. None of the above.

3. A self-supporting commercial greenhouse, where the distance from the ridge to the eaves is equal on both sides is
   A. an even-span greenhouse.
   B. a ridge-and-furrow greenhouse.
   C. a Quonset greenhouse.
   D. All of the above.
   E. None of the above.

4. What structural part of a greenhouse allows ventilation during light rain, provided that there is no strong wind?
   A. sash bar.
   B. shutters.
   C. ridge and side ventilators.
   D. All of the above.
   E. None of the above.

5. The part of a plant that transfers water up from the roots to the leaves is the
   A. vascular artery.
   B. phloem.
   C. herbaceous artery.
   D. All of the above.
   E. None of the above.
6. All the sepals together, considered as a group or a unit, is the
   A. calyx.
   B. corona.
   C. corolla.
   D. All of the above.
   E. None of the above.

7. No. 40 ribbon is used for
   A. floral hair pieces.
   B. wedding accessories and funeral arrangements.
   C. corsages and bud vases.
   D. All of the above.
   E. None of the above.

8. No. 28-30 gauge wire is used
   A. to support flowers such as roses, carnations, and mums.
   B. to support larger flower stems or heavy flowers such as gladioli, lilies, and snapdragons.
   C. for delicate corsage work.
   D. All of the above.
   E. None of the above.

9. What type of spray equipment sprays a mist, is used for high concentrate applications, and allows
   the applicator to travel through the greenhouse or outside areas, but is not used for herbicides.
   A. hose-end sprayer.
   B. back pack mist blower.
   C. compressed air sprayer.
   D. All of the above.
   E. None of the above.

10. A Class II pesticide will
    A. be marked with “WARNING”.
    B. be moderately toxic.
    C. pose a threat to humans or the environment, even when used as directed.
    D. All of the above.
    E. None of the above.

11. What is used to improve aeration, holding 3-4× its dry weight in water. It has a neutral pH and
    will not hold nutrients.
    A. pine bark.
    B. vermiculite.
    C. peat moss.
    D. All of the above.
    E. None of the above.

12. Porous soil provides
    A. nitrogen.
    B. aeration.
    C. nutrient retention.
    D. All of the above.
    E. None of the above.
13. Assume your greenhouse’s fertilizer injector is set at a 1:300 ratio. How many ounces of 12-36-14 fertilizer will be added to its 50 gallon tank to supply 50ppm N?
   A. 2.77 oz.
   B. 5.54 oz.
   C. 11.08 oz.
   D. All of the above.
   E. None of the above.

14. Deficiency of this primary element causes yellow leaves and stunted growth.
   A. Potassium
   B. Nitrogen
   C. Phosphorus
   D. All of the above.
   E. None of the above.

15. Short day plants, such as poinsettias and mums,
   A. flower when the nights are long.
   B. flower when the days are long.
   C. flower when the nights are short.
   D. All of the above.
   E. None of the above.

16. Bulb pans are
   A. as wide as they are tall.
   B. shallow and much wider than they are tall.
   C. the same size as Azalea pots.
   D. All of the above.
   E. None of the above.

17. The tool used to make a small hole in soil for transplanting a seedling is a
   A. spade.
   B. dibble.
   C. dapple.
   D. All of the above.
   E. None of the above.

18. Stem caliper of a tree is measured
   A. 12” above the soil line.
   B. 18” above the soil line.
   C. 24” above the soil line.
   D. All of the above.
   E. None of the above.

19. Spring flowering deciduous trees should be pruned in the
   A. spring, just before breaking dormancy.
   B. fall, just after they drop their leaves.
   C. winter to avoid “bleeding”.
   D. All of the above.
   E. None of the above.

20. Parsley, peas, radish, and rhubarb are
   A. tender.
   B. very hardy.
   C. warm loving.
   D. All of the above.
   E. None of the above.
MATCHING: In each section, darken the circled number on the answer sheet corresponding to the best answer for each question from the categorical answers in that section. Each correct answer adds five points to your score.

21. Used for trimming and shaping hedges and simple pruning jobs
   A. Garden fork
   B. Hedge shears
   C. Pole pruner and saw
   D. Spade
   E. Straight shovel

22. Used to turn soil in lawn and garden areas
   A. Garden fork
   B. Hedge shears
   C. Pole pruner and saw
   D. Spade
   E. Straight shovel

23. Used for cutting soil, digging trenches with straight sides, digging narrow holes for planting trees and shrubs, and for cutting turf
   A. Garden fork
   B. Hedge shears
   C. Pole pruner and saw
   D. Spade
   E. Straight shovel

24. Used to remove branches that are out of reach
   A. Garden fork
   B. Hedge shears
   C. Pole pruner and saw
   D. Spade
   E. Straight shovel

25. Poisonous
   A. Combustible
   B. Flammable
   C. Hazard
   D. Incident
   E. Toxic

26. Capable of being easily ignited and burning quickly
   A. Combustible
   B. Flammable
   C. Hazard
   D. Incident
   E. Toxic

27. Capable of bursting into flames
   A. Combustible
   B. Flammable
   C. Hazard
   D. Incident
   E. Toxic

28. Source of danger
   A. Combustible
   B. Flammable
   C. Hazard
   D. Incident
   E. Toxic

29. Process to remove soluble salts from the soil by water action
   A. Capillary pores
   B. Leaching
   C. Non-capillary pores
   D. Soluble salts
   E. Transpiration

30. Any of the various mineral salts that can be dissolved in water
   A. Capillary pores
   B. Leaching
   C. Non-capillary pores
   D. Soluble salts
   E. Transpiration

31. Solid spaces containing soil or water
   A. Capillary pores
   B. Leaching
   C. Non-capillary pores
   D. Soluble salts
   E. Transpiration

32. Evaporation process in which a plant loses moisture through small openings in the leaves
   A. Capillary pores
   B. Leaching
   C. Non-capillary pores
   D. Soluble salts
   E. Transpiration

33. Plants that keep their foliage year round
   A. Conifer
   B. Deciduous
   C. Evergreens
   D. Fingers
   E. Holdfasts

34. Plants that lose their foliage at the end of the growing season
   A. Conifer
   B. Deciduous
   C. Evergreens
   D. Fingers
   E. Holdfasts

35. Small, circular discs at the tips of some tendrils
   A. Conifer
   B. Deciduous
   C. Evergreens
   D. Fingers
   E. Holdfasts

36. Plant that bears cones
   A. Conifer
   B. Deciduous
   C. Evergreens
   D. Fingers
   E. Holdfasts

37. Non-woody; type of plants grown in greenhouse operations
   A. Grafting
   B. Grafting tape
   C. Grafting wax
   D. Herbaceous
   E. Semi-hardwood

38. Method of attaching twigs, buds, or roots onto other stems or roots so that tissues are joined and a new plant results
   A. Grafting
   B. Grafting tape
   C. Grafting wax
   D. Herbaceous
   E. Semi-hardwood

39. Used to seal grafts
   A. Grafting
   B. Grafting tape
   C. Grafting wax
   D. Herbaceous
   E. Semi-hardwood

40. Current year's growth on a hardwood plant at the end of the growing season
   A. Grafting
   B. Grafting tape
   C. Grafting wax
   D. Herbaceous
   E. Semi-hardwood