

Floriculture General Knowledge Exam
2024 SMSU Ag Bowl Scholarship Invitational



1. _____ is a rigid greenhouse covering that is made of double layers, has high light transmission, is flame retardant, and has the strongest resistance to breakage.
 - a. Polyethylene
 - b. Fiberglass
 - c. Polycarbonate
 - d. Glass

2. Fungus diseases are spread by small seed-like structures called
 - a. spores
 - b. roots
 - c. pollen
 - d. nematodes

3. A _____ color scheme is made up of 4 total colors, the two colors on each side of a complimentary color on the color wheel.
 - a. Complementary
 - b. Split-complementary
 - c. Double split-complementary
 - d. Polychromatic or tetrad

4. Where is a floral arrangement should light-colored flowers be placed?
 - a. near the top or outside edges of the flower arrangement
 - b. near the center of the flower arrangement
 - c. towards the bottom of the flower arrangement
 - d. light-colored flowers should not be used as a rule.

5. These insects are identified by the cottony material found on stems and along leaf veins.
 - a. aphids
 - b. mealybugs
 - c. spider mites
 - d. whiteflies

6. Your foliage plants are facing a pest problem. The buds, flowers, and tender new growth are pitted or stunted. Tiny insects are often invisible. A sticky fluid secreted by the insects provides a medium for the growth of sooty mold and attracts ants. The most likely candidates are:
 - a. spider mites
 - b. aphids
 - c. mealybugs
 - d. snails and slugs

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7. Cut carnations are classified into two groups:
- floral and greenhouses
 - standards and miniatures
 - premium and discount
 - none of the above
8. A process used by growers to produce well-branched, compact plants with many flowers is called?
- stunting
 - compacting
 - pinching
 - potting
9. There are three basic types of pots that are commonly used in the greenhouse industry. Which of the following is not one of the basic types?
- designer pot
 - standard pot
 - azalea pot
 - bulb pot or pan
10. There are three primary ways that heat is lost in a greenhouse. Which of the following is not correct?
- air leakage
 - solarization
 - conduction
 - radiation
11. Pot mums in 6-inch pots should average flowering shoots per pot.
- 5 to 10
 - 20 to 30
 - 60 to 80
 - 80 to 100
12. A greenhouse producer of young seedlings for shipping for finishing by others is referred to as a _____ producer.
- finisher
 - seed
 - plug
 - knot

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13. The advantage of single-eye (leaf-bud) cuttings is that:
- they produce flowers more quickly
 - they grow faster than stem cuttings
 - they are less likely to become infected with diseases
 - from the same amount of propagation material, they give more plants
14. Which of the following is not a part of the pistil of a flower?
- stigma
 - style
 - anther
 - ovary
15. After removing bedding plants from the greenhouse they should be _____ before planting outside.
- pruned
 - fertilized
 - hardened off
 - pinched
16. Which of the following plant pairs require long night (short day) conditions for flowering?
- Azalea and Rose
 - Carnation and Poinsettia
 - Poinsettia and Chrysanthemum
 - Chrysanthemum and Azalea
17. Leaf petiole cuttings can be used to propagate:
- Marigolds
 - Chrysanthemums
 - Boston Ferns
 - African Violets
18. A method of applying pesticides to plants that can be effectively used in greenhouses, but not outdoors is:
- spraying
 - fumigation
 - dusting
 - soil drenching
19. The acceleration of flowering by manipulation of environmental conditions is known as:
- pulsing
 - forcing
 - leaching
 - after-ripening

20. What is the proper term to describe the cold treatment, which lasts several weeks and precedes the initiation of flower buds?

- a. pot cooling
- b. vernalization
- c. case cooling
- d. CTF cooling

21. New businesses should realize that it usually requires _____ for the business to show a profit and owners should plan accordingly.

- a. 3 to 5 months
- b. 1 to 3 years
- c. 15 to 24 months
- d. 3 to 5 years

22. Lime furnishes the plant food element

- a. nitrogen
- b. phosphorus
- c. potash
- d. calcium

23. Potassium causes plants to

- a. produce more flowers and seeds
- b. resist disease and develop strong roots
- c. grow much larger than they would otherwise
- d. grow rapidly and develop a dark green color

24. A soil having equal parts of sand, silt, and clay is called

- a. an aggregate
- b. a mixture
- c. a loam
- d. sandy

25. Nitrogen causes plants to

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- b. resist disease and develop strong roots
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26. The date to start seeds is very important because

- a. there must be greenhouse space made available for them
- b. seed houses have seeds available only at certain times
- c. the seeding medium must be ready
- d. the plants must often be ready for sale or planting at a certain time

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27. Which two of the following materials are mixed in the seeding medium to give good drainage and aeration?
- a. peat moss and vermiculite
 - b. sand and sphagnum moss
 - c. sand and perlite
 - d. perlite and peat moss
28. The best answer for soil temperature on average for germinating seeds is?
- a. 50 to 60 degrees F
 - b. 65 to 70 degrees F
 - c. 75 to 80 degrees F
 - d. 80 to 90 degrees F
29. When two separate parent plants are involved in the pollination process, it is known as
- a. self-pollination
 - b. cross-pollination
 - c. bisexual pollination
 - d. asexual pollination
30. Seeds are composed of the
- a. seed coat, endosperm, and embryonic plant
 - b. seed coat, root, and stem
 - c. eye starch, and seed coat
 - d. root system, starch coat, and seed coat
31. Producing plants from seed is a type of _____ propagation.
- a. asexual
 - b. bisexual
 - c. sexual
 - d. unsexual
32. Pores in epidermal cells that open to allow for gas exchange and control water loss.
- a. samara
 - b. stomata
 - c. pome
 - d. guard cells
33. What are the parts of a cell that drive the process of respiration and energy transfer?
- a. Golgi bodies
 - b. mitochondria
 - c. endoplasmic reticulum (ER)
 - d. ribonucleic acid (RNA)

34. The basic unit of a plant that contains many different organelles that drive plant processes.

- a. mitochondria
- b. heterotroph
- c. cell
- d. indehiscent

35. The thin stalk in the stamen of a flower that supports the anthers.

- a. stomata
- b. pith
- c. filament
- d. nodes

36. The release of water through plant leaves, which then evaporates and helps cool the air.

- a. transpiration
- b. evapotranspiration
- c. photosynthesis
- d. propagation

37. The science, cultivation, processing, storage, and marketing of herbs and vegetables.

- a. botanist
- b. olericulture
- c. horticulturist
- d. viticulturist

38. The cooling, cleaning, sorting, storing, packing, and shipping of produce, flowers, and other plant materials.

- a. postharvest
- b. pomology
- c. locavore
- d. bramble

39. The portion of the horticulture industry that cultivates and arranges outdoor plant materials to create spaces that are inviting, beautiful, and useful to people and the ecosystem.

- a. silviculture
- b. locavore
- c. interior scaping
- d. nursery and landscape

40. A hormone produced and emitted in varying quantities by fruits and vegetables and by decaying plant materials.

- a. ethylene
- b. locavore
- c. methane
- d. geocarpy

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41. A valuable and widely used method for achieving unity is through _____, in which some element of the floral arrangement repeats throughout the design to relate the _____.

- a. Repetition – parts to one another and to the whole.
- b. Repetition – same parts to the surroundings of the design or setting.
- c. Repetition – parts to the theme of the venue.
- d. Solitude – parts to none of the parts in the design as a whole.

42. The choice of a container, vase, or _____ may depend on physical factors such as the size of the bouquet, the size of the flowers, the mood and color for a design, the shape of the design, and the placement for a bouquet.

- a. Texture
- b. Foundation
- c. Form
- d. Flow

43. Citric acid treatment speeds the intake of water, helping to prevent _____ in roses and gerberas.

- a. Hardening
- b. Dry Packed
- c. Bent Neck
- d. Pulsing

44. Flowers are kept in the refrigerator to help keep them fresh before selling. There are three main functions of refrigerated storage for fresh flowers until they are selected. Which of these in one of those main reasons:

- a. To reduce the rate of respiration
- b. To increase water loss
- c. To activate growth hormones
- d. None of the above

45. _____ is the green pigment found in plant cells, prominent in leaves and stems.

- a. Cytokinins
- b. Carotenoids
- c. Chlorophyll
- d. Photosynthesis

46. A _____ is a growth curvature caused by some external stimulus such as light or gravity.

- a. Tropism
- b. Photosynthesis
- c. Transpiration
- d. Hormones

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47. A leaf with a single _____ (the broad flattened part of a leaf) is a simple leaf.

- a. Leaflets
- b. Stipules
- c. Blade
- d. Petiole

48. Which color is considered achromatic?

- a. Blue
- b. Yellow
- c. Red
- d. White

49. Floral designers determine the height, width, and depth of designs based on an arrangement's final destination and application. This requires a good understanding of _____.

- a. Texture
- b. Proportion
- c. Line
- d. Harmony

50. _____ flowers are closed-form, single flowers that have a dense, rounded shape.

- a. Live
- b. Line
- c. Mass
- d. Form

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