

HORT 201
PRACTICE FINAL EXAM

- 1) Which area of horticulture concerns the culture, utilization and improvement of flowering and foliage plant crops?
 - a) olericulture
 - b) pomology
 - c) floriculture
 - d) agronomy
 - e) forestry

- 2) Which cell type is isodiametric and has evenly thickened, non-lignified, primary cell walls, and occurs in soft plant tissue such as sweet potatoes?
 - a) xylem
 - b) fiber
 - c) collenchyma
 - d) sclereid
 - e) parenchyma

- 3) Which cell wall layer is responsible for making the cell walls of woody plants tough and rigid?
 - a) primary cell wall
 - b) middle lamella
 - c) secondary cell wall
 - d) plasmalemma

- 4) In protein synthesis, which of the following is responsible for bringing the amino acids to the ribosome?
 - a) DNA
 - b) protein
 - c) mRNA
 - d) chromosome
 - e) tRNA

- 5) Which is the name of the meristem that produces the periderm?
 - a) basal meristem
 - b) apical meristem
 - c) intercalary meristem
 - d) vascular cambium
 - e) phellogen

- 6) When viewed in cross-section, which type of plant has a stem with rings of xylem in the center, surrounded by a ring of cambium, then phloem, then cortex, then epidermis?
 - a) monocot in primary growth
 - b) gymnosperm in primary growth
 - c) monocot in secondary growth
 - d) gymnosperm in secondary growth

- 7) A _____ leaf is composed of a blade that occurs as one unit, e.g. it is not divided into leaflets.
 - a) parallel
 - b) palmately compound
 - c) simple
 - d) pinnately compound

- 8) Cucumbers are monoecious. Therefore, when I plant cucumbers in my garden from seed, which of the following will be true?
 - a) some of the cucumber plants will make cucumbers
 - b) none of the cucumber plants will make cucumbers
 - c) all of the cucumber plants will make cucumbers

- 9) During the process of photosynthesis, which reaction produces the sugars?
 - a) cytochrome system
 - b) glycolysis
 - c) light reaction
 - d) Krebs Cycle
 - e) dark reaction

- 20) Which climatic zone occurs between the Tropic of Cancer and the Tropic of Capricorn?
- Arctic Climatic Zone
 - Tropical Climatic Zone
 - Temperate Climatic Zone
 - Sub-tropical Climatic Zone
- 21) If the overnight low is predicted to be 20 °F and the dew point is 40 °F, then which of the following type frosts would you predict to occur in the morning?
- black
 - white
- 22) What is the most effective or ideal method to prevent damage to plants in a landscape from an advective freeze?
- fly helicopters over house
 - plant on south side of a house
 - apply sprinkler irrigation
 - apply mulch
 - select plants that can tolerate the level of cold in your area
- 23) Tulip bulbs are dormant due to rest. How should one treat tulip bulbs in order to cause them to flower?
- store for 2-3 months at below freezing
 - store for 2-3 months at 35-40 °F
 - store for 2-3 months at room temperature
 - excise the embryo and put in tissue culture
 - treat with abscisic acid
- 24) Houston receives about 400 hours of chilling temperatures during the winter. What would happen if you planted 'Golden Delicious' apples, which is a 1,000 hour variety, in Houston?
- it would flower too early
 - it would flower normally
 - it would flower too late, if at all
 - it would die due to cold damage
 - it would bolt
- 25) Elongated, pale green to yellow stems due to low light is called _____.
- photooxidation
 - bleaching
 - blanching
 - etiolation
- 26) We talked about the relationship of photosynthesis to respiration during light acclimatization. What is the light intensity where the rate of photosynthesis and rate of respiration are equal?
- light saturation point
 - light equalization point
 - light compensation point
 - light neutralization point
 - light subsistence point
- 27) Which of the following would cause a day-neutral plant to flower?
- add light at the beginning of the night
 - add light at the end of the night
 - cover with black cloth at the end of the day
 - night interrupt with light in the middle of the night
 - all would cause a day-neutral plant to flower, because they flower under all conditions
- 28) As air rises into the atmosphere, its temperature decreases. What happens to the relative humidity of the air?
- the relative humidity increases
 - the relative humidity decreases
 - the relative humidity stays the same

- 29) What part of the stem translocates most of the water up stems of woody plants?
- a) periderm
 - b) endodermis
 - c) sap wood
 - d) heart wood
 - e) root hairs
- 30) What is the best way to prevent water loss from cuttings during propagation?
- a) spray with antitranspirants
 - b) spray with humectants
 - c) place in humidity chamber
 - d) place under intermittent mist
 - e) remove all leaves
- 31) Which of the following irrigation systems also can be automated?
- a) chapin tube
 - b) drip
 - c) sprinkler
 - d) none can be automated
 - e) all can be automated
- 32) Which salt in the tap water of College Station is bad for our soil because it causes the soil to loose its good structure?
- a) Cl
 - b) Ca
 - c) Na
 - d) Mg
 - e) all salts are bad because they will cause this
- 33) Which of the following is a lime?
- a) gypsum
 - b) iron sulfite
 - c) dolomite
 - d) Epsom salt
 - e) urea
- 34) The new leaves or stem tips of plants will be the location of deficiencies of which of the following type of nutrients.
- a) mobile nutrients
 - b) immobile nutrients
- 35) Which of the following nutrients is more available in a soil that has an intermediate pH of 6-7?
- a) Zn
 - b) Mo
 - c) K
 - d) B
 - e) P
- 36) Which fertilizer ratio favors root growth?
- a) 1-3-3
 - b) 1-1-1
 - c) 3-1-1
 - d) they would all favor root growth
- 37) N deficiency causes _____.
- a) interveinal chlorosis of new leaves
 - b) overall chlorosis of new leaves
 - c) interveinal chlorosis of old leaves
 - d) overall chlorosis of old leaves
- 38) Chalk or gypsum is a _____ fertilizer.
- a) Ca
 - b) Mn
 - c) Cu
 - d) Mg
 - e) N
- 39) What kind of C:N ratio does an organic N fertilizer have?
- a) high
 - b) low

- 40) Bluebonnets have hard seed coats (hard seed coat dormancy). What is the recommended method to cause them to germinate more quickly?
- use scarification
 - excise their embryo
 - use stratification
 - treat with red light
 - soak in cytokinin
- 41) Can you reproduce a clone true-to-type from seed?
- yes
 - no
- 42) You can propagate begonia plants by cutting their leaf blades into small pieces. What type of cutting is this?
- rhizome
 - leaf bud
 - leaf blade
 - leaf section
 - leaf petiole
- 43) Chimeras can be propagated true-to-type by any asexual propagation method.
- true
 - false
- 44) In layering, one must make the cuts such that it severs as much of the _____ as possible.
- xylem
 - phloem
- 45) Which of the following grafting or budding method **does not** require the bark to be slipping?
- patch bud
 - bark inlay graft
 - T-bud
 - cleft graft
 - flute bud
- 46) Which of the following pruning methods removes the limb back to the point of its origin?
- pollarding
 - dehorning
 - heading-back
 - thinning-out
- 47) For non-flowering trees and shrubs, when is the best time to prune them?
- anytime in the fall
 - early summer
 - after cold of winter and before new growth in spring
 - late summer
- 48) Which of the following biological control organisms is a mite that eats other mites and small insects?
- Bacillus thuringiensis*
 - parasitic wasps
 - Trichoderma*
 - white mould
 - predaceous mites
- 49) Which type pest is soft bodied, may or may not have a shell, chews leaf tissue, and leaves slime trails.
- insect
 - nematode
 - mite
 - mollusk
 - mycoplasma

- 50) You go home after the semester and one of your relatives shows you their plant. It is alive, but is not growing very much. So they ask you diagnose the problem. Which of the following are possible answers?
- a) it was in too low light
 - b) it had not been getting enough fertilizer
 - c) it had a virus
 - d) it has not been watered enough
 - e) all of these are possible causes, and more information would be needed to know which one

KEY

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| 1) c | 26) c |
| 2) e | 27) e |
| 3) c | 28) a |
| 4) e | 29) c |
| 5) e | 30) d |
| 6) d | 31) e |
| 7) c | 32) c |
| 8) c | 33) c |
| 9) e | 34) b |
| 10) a | 35) e |
| 11) b | 36) a |
| 12) b | 37) d |
| 13) b | 38) a |
| 14) d | 39) b |
| 15) b | 40) a |
| 16) b | 41) b |
| 17) e | 42) d |
| 18) d | 43) b |
| 19) b | 44) b |
| 20) b | 45) d |
| 21) b | 46) d |
| 22) e | 47) c |
| 23) b | 48) e |
| 24) c | 49) d |
| 25) d | 50) e |