

## 2010 Area Crops Evaluation Exam



**Instructions:** READ EACH MULTIPLE CHOICE STATEMENT CAREFULLY AND THEN MARK THE ANSWER ON THE SCORE SHEET THAT CORRESPONDS TO THE BEST ANSWER.

**GOOD LUCK!**

1. Which of these is an advantage of using no-till?
  - A. Better insect control
  - B. Decreased herbicide use
  - C. Decreased fuel consumption
  - D. Decreased disease pressure
  
2. Rhizobium nodules on legumes are healthy and active when \_\_\_\_ in color
  - A. Green
  - B. Brown (tannish color)
  - C. Yellow
  - D. Pink (steak color)
  
3. Corn smut is caused by
  - A. Bacteria
  - B. Fungus
  - C. Pathogen
  - D. Insects
  
4. Corn growth and development strongly depends on
  - A. Length of night
  - B. Temperature
  - C. Amount of herbicide a grower uses
  - D. Length of day light
  
5. The protective outer covering of a grain kernel is the
  - A. Pericarp
  - B. Skin
  - C. Coleoptile
  - D. Endosperm
  
6. The two conditions that contribute to lodging in wheat are
  - A. Lodging disease and smut
  - B. Low seeding rate and poor fertilizer
  - C. High nitrogen fertilization and high seeding rate
  - D. Take all disease and poor fertilization

7. The largest source of error in lab results usually occurs from
  - A. Dirty lab equipment
  - B. Laboratory machines that do not function properly
  - C. Sampling techniques
  - D. Chemical problems in the lab
  
8. A legume flower always has \_\_\_ petals
  - A. 4
  - B. 5
  - C. 6
  - D. 7
  
9. Red clover exhibits a \_\_\_ type of inflorescence
  - A. Umbel
  - B. Spike
  - C. Head
  - D. Panicle
  
10. Wild oat exhibits a \_\_\_ type of inflorescence
  - A. Umbel
  - B. Spike
  - C. Head
  - D. Panicle
  
11. Soybean growth and maturation is most affected by:
  - A. Light intensity
  - B. Angle of the sun
  - C. Temperature
  - D. Day length
  
12. If you live in Evansville, IN, you will plant a group \_\_\_\_ soybean
  - A. II
  - B. II and III
  - C. III
  - D. IV

13. Which of the following is NOT a macronutrient?
- A. Nitrogen
  - B. Sulfur
  - C. Calcium
  - D. Iron
14. Roots are different from stems as roots do NOT have
- A. Xylem
  - B. Rhizobia
  - C. Nodes and internodes
  - D. Phloem
15. There are \_\_\_\_ acres in one square mile
- A. 640
  - B. 20
  - C. 40
  - D. 160
16. What is the recommended nitrogen rate for soybeans?
- A. 0 lb/Acre
  - B. 10 lb/Acre
  - C. 20 lbs/Acre
  - D. 200 lbs/Acre
17. How many bushels of corn will fit in a grain bin that is 20 feet wide, 25 feet to the eave and 30 feet tall at the top of the cone?
- A. 5024 bushels
  - B. 6736 bushels
  - C. 10, 708 bushels
  - D. 13, 190 bushels
18. A bushel is a measure of
- A. Weight
  - B. Density
  - C. Area
  - D. Volume

19. What type of nozzle would be best to use if you are spraying for weed and brush control along roadsides?
- A. Broadcast
  - B. Flat fan
  - C. Flooding fan
  - D. Hollow cone
20. You have a 27 acre field. How many square miles is this?
- A. 0.042 square miles
  - B. 0.052 square miles
  - C. 17,280 square miles
  - D. 1.72 square miles
21. When scouting your soybean field, you find a yellow-green larvae that has two distinguishable white stripes down its back. What is your pest?
- A. Stink bug
  - B. Green cloverworm
  - C. Spider mite
  - D. Wireworm
22. Johnsongrass is distinguishable from sudangrass because johnsongrass has
- A. Flowers
  - B. Stolons
  - C. Internodes
  - D. Rhizomes
23. When using urea as a nitrogen source, what percent is nitrogen?
- A. 42
  - B. 24
  - C. 46
  - D. 64
24. The term "CEC" refers to
- A. Corn Economic Council
  - B. Cation Exchange Capacity
  - C. Corn Exchange Capacity
  - D. Cation Economic Capacity

25. How many liquid ounces are in a gallon?
- A. 128 oz.
  - B. 110 oz.
  - C. 54 oz.
  - D. 220 oz.
26. Wet soils are \_\_\_\_\_ to warm in the spring than dry soils
- A. Quicker
  - B. Slower
  - C. No difference
27. In grain grading, damage kernels (total) for soybeans includes damaged splits.
- A. True
  - B. False
28. In grain grading, a soybean split is considered to be a soybean that has more than  $\frac{1}{4}$  of the seed missing.
- A. True
  - B. False
29. Legume seeds during their development are attached to the pod by the endosperm.
- A. True
  - B. False
30. Which clover has leaves located directly under the flower?
- A. White clover
  - B. Alsike clover
  - C. Red clover
  - D. None of the above
31. A node is
- A. The origin of a plant
  - B. The origin of seeds
  - C. The origin of roots
  - D. The origin of leaves

32. Which of the following is NOT a structure of a grass leaf
- A. Ligule
  - B. Sheath
  - C. Node
  - D. Collar
33. A weed that can be identified by having a heart shaped leaf with a trumpet shape flower and grows as a vine is
- A. Wild carrot
  - B. Tall morningglory
  - C. Ivyleaf morninglory
  - D. Field bindweed
34. Which foxtail has hairs on the upper surface of the leaf?
- A. Giant foxtail
  - B. Green foxtail
35. During the grain grading procedure, which of the following is not a factor for calculating defects (total) in wheat?
- A. Damaged kernels (total)
  - B. Foreign material
  - C. Dockage
  - D. Shrunken and broken kernels
36. The flattened portion of a grass leaf is known as
- A. Auricle
  - B. Blade
  - C. Ligule
  - D. Sheath
37. A plant who has a 2 year lifecycle is known as
- A. Biennials
  - B. Perennials
  - C. Annuals
  - D. Winter annual

38. Corn kernels on an ear have gained the maximum amount of dry matter content when
- A. The ear drops
  - B. Kernels dent
  - C. Black layer formation occurs
  - D. The kernels are below 20% moisture
39. The area between two nodes on a plant is known as
- A. The sheath
  - B. The ligule
  - C. The internode
  - D. The leaf
40. The growing point of a corn plant is above ground
- A. True
  - B. False

