

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. Ivy leaf morningglory
 - 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

