

**CALIFORNIA STATE UNIVERSITY, FRESNO**  
Department of Plant Science, Jordan College of Agriculture Science & Technology  
and  
FFA Field Day Committee

**59<sup>th</sup> ANNUAL COTTON JUDGING CONTEST (A&B)**  
**November 5, 2016**

**WRITTEN EXAMINATION**

All answers must be indicated on the accompanying **SCANTRON ANSWER SHEET by completely blocking out the one correct answer using a No. 2 lead pencil.** All questions pertain to cotton grown in the **San Joaquin Valley (SJV) unless otherwise stated.**

**I.      TRUE-FALSE:**      Indicate whether the statement is true or false by **blocking out the correct answer. Fill in ‘A’ if the statement is true or ‘B’ for false.**

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1. In 2016, San Joaquin Valley Pima cotton was planted on 150,000+ acres.
  2. For the marketing year 2015-16 the average price for Acala fibers ranged 78-80 cents per pound.
  3. In 1925, California state legislature established a one-variety district in the San Joaquin Valley.
  4. California legislation enacted a law in 1960 to permit the commercial production of Pima cotton.
  5. March 20<sup>th</sup> is the first legal planting date for Pima and Acala cottons in the San Joaquin Valley.
  6. The 2016 California cotton acreage (Pima and Acala combined) was more than planted in 2015.
  7. “Nodes above white flower” is a monitoring method used to determine defoliation scheduling.
  8. *Thielaviopsis* and *Rhizoctonia* are early season disease problems in California cotton.
  9. Pink bollworm is the pest causing the most serious square damage and loss to both Pima and Acala cottons grown in the San Joaquin Valley.
  10. The transgenic trait most important for California cotton growers is herbicide tolerance.
  11. “Nodes above cracked boll” is a monitoring technique used to determine physiological cut-out.
  12. In 1985 California’s leading row crop Cotton was planted on more than 1.5 million acres.
  13. The progression of cotton flower petals changing colors from “white or yellow” to “red or purple” normally takes 6 days.
  14. Sticky cotton is only caused by aphids.
  15. Monthly evapotranspiration for irrigated cotton is greater in July than in June.
  16. Of the cotton varieties (Acala or Pima) grown in the San Joaquin Valley only Acalas have any resistance to Fusarium (IV).
  17. Cotton lint yields and fiber quality can be affected by potassium deficiency.
  18. Pima cotton has higher staple lengths but has lower strength values.

19. Roller ginned Acala cotton demands the same price as roller ginned Pima.
20. Planting depth of more than 2 inches enhances exposure to seedling disease pathogens and weakens seedlings as they struggle to reach the soil surface.
21. The base temperature for calculating cotton degree days (Heat Units) is 50 degrees F.
22. A mote is an undeveloped ovule that remains as a contaminant in a cotton boll.
23. Cotton yield potential typically decreases with planting dates after April 15th.
24. Skillful management, using high yielding varieties, growth regulators, and good pest control with optimal growing weather can reduce the effects of late planting on final yield.
25. Botanically the cotton plant is a perennial shrub that is replanted each year.
26. The March planting date and December plow-down requirements are components of a 90-day host free period developed to prevent Pink Bollworm establishment.
27. The scientific name for Pima cotton types is *Gossypium hirsutum*.
28. The height to node ratio is a plant vigor index used to determine "Cut-out".
29. Ginning at very low fiber moisture will cause more fiber breakage, reducing HVI uniformity and length.
30. Fiber from bale grades of 21-2-38 is priced higher than fibers of bale grades of 31-3-36.
31. The Roundup Flex (RF) gene is available in most Pima and upland varieties.

**II. MULTIPLE CHOICE: Block out the letter answer for each question.**

32. After developing cotton fibers reach their final length, secondary wall thickening is completed in another \_\_\_\_\_ days.
 

a. 9	b. 14	c. 20
d. 24	e. 30	
33. The first flowering branch of pima cottons typically occurs on which main stem node?
 

a. 3 – 5 <sup>th</sup> node	b. 6 – 9 <sup>th</sup> node	c. 10 – 11 <sup>th</sup> node
d. 12 – 13 <sup>th</sup> node	e. 14 – 15 <sup>th</sup> node	
34. "cut-out" as measured by NAWF is caused by:
 

a. irrigation cut-off	b. late season high temperatures	c. pest pressure
d. reduced solar radiation	e. physiological stress from developing bolls	
35. When cotton prices move up 100 points, the price has increased by;
 

a. 1 cent	b. 10 cents	c. 1 dollar
d. 1000 cents	e. none of the above	
36. A 100-point increase in cotton price translates into a \_\_\_\_\_ \$ increase per bale.
 

a. 1	b. 5	c. 10	d. 20	e. 100
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37. Which transgenic cotton trait has reduced the most pesticide used on cotton grown around the world?
 

a. Sulfonylurea (SU)	b. Bromoxynil (BXN)	c. Insect resistance (Bt)
d. Glyphosate (Roundup)	e. None of the above	



Use the photos for questions 46, 47, 48.

**A**



**B**



**C**



**D**



**E**



**Important Note:** Calcot is California's oldest grower owned cotton marketing cooperative. It offers a \$10,000 scholarship (Calcot-Seitz Scholarship) to high school seniors or college students attending a 4-year college majoring in Agriculture with emphasis on production or Ag Business. Check it out with your teacher.