



Practice Questions: CCA Exam, Crop Production

**Based on
2016 Performance Objectives**

Practice Questions:

Varieties & Seed Certification



1) When recommending corn hybrids to a New York farmer, which of the following should be your most important consideration:

- a) Single cross or modified single cross
- b) Seed price.
- c) Genetically engineered or not genetically engineered.
- d) Yield potential.

2) How many growing degree days (86-50 system) would be gained on a day in July with a high of 90° F and a low of 66° F?



3) Which of the following is not listed on the seed tag:

a) Germination %.

b) Age of seed.

c) Weed seed content.

d) Other crop seed %.

4) The label on a 50 lb. bag of seed provides the following information:

Germination	80%
Inert matter	5%
Other crop seed	3%
Weed seed	2%

How many pounds of “pure live seed” does this bag contain?

5) Seed certification standards for individual states in the U.S.:

- a) Must be exactly the same from state to state.
- b) Depend entirely on the state seed laws and regulations.
- c) Must meet international standards (OECD).
- d) Vary from state to state but must meet or exceed certain requirements.

Practice Questions: Forage Crop Management

National Exam:

Section related to forages is probably very brief.

New York State Exam:

More forages than national exam.

1) What happens if forages are harvested before carbohydrate reserves are built up?

(example question for national exam)

a) overall yield may be reduced.

b) the plant is stronger.

c) the plant will easily regrow.

d) protein content is higher.

1) What happens if forages are harvested before carbohydrate reserves are built up?

a) overall yield may be reduced.

This is their correct answer.

Don't over think your answers!

d) protein content is higher.

Is also correct!

2) Which of the following
is the smallest?

**Eliminate the silly or obvious
wrong answers!**

c) Timothy seed.

d) Miscanthus seed.

3) Which of the following perennial grasses have a bunch-type habit (without rhizomes):

a) Reed canarygrass.

b) Orchardgrass.

c) Smooth bromegrass.

If you don't know the answer
MOVE ON!

4) Annual forages for pasture:

**Be careful with *All of the above*
or *None of the above!***

fertilization.

c) require intensive
management.

d) all of the above.

5) Which of the following perennial grasses have low carbohydrate reserves during stem elongation:

Choose the most correct answer! (Timothy also correct)

c) Smooth bromegrass.

d) Timothy.

6) When selecting a reed canarygrass variety for forage the most important characteristic is:

- a) high yield.
- b) low endophyte.
- c) low alkaloids.**

Pay close attention when a question says *most* or *least*!

7) What characteristic is most important when establishing perennial forage crops:

a) forage yield.

b) soil drainage.

c) forage quality.

Northeast answer may be different from National answer!

8) A seeding mixture of alfalfa and a perennial grass (compared to a pure alfalfa seeding):

a) improves weed control options.

b) more likely to result in alfalfa "heaving" in the spring.

c) should not affect harvest management. **40% chose C**

d) improves alfalfa persistence on fragipan soils.

Practice Questions: Grain Crop Production



1) Crops that require vernalization will only flower after:

a) days become longer.

b) an extended period of cold temperatures.

c) days become shorter.

d) an extended period of warm temperatures.

2) Monocots, which include:

- a) corn, wheat, and oats, or
- b) soybeans, alfalfa and cotton

have a

- c) coleoptile or
- d) hypocotyl

that emerges first to
reduce crusting problems.

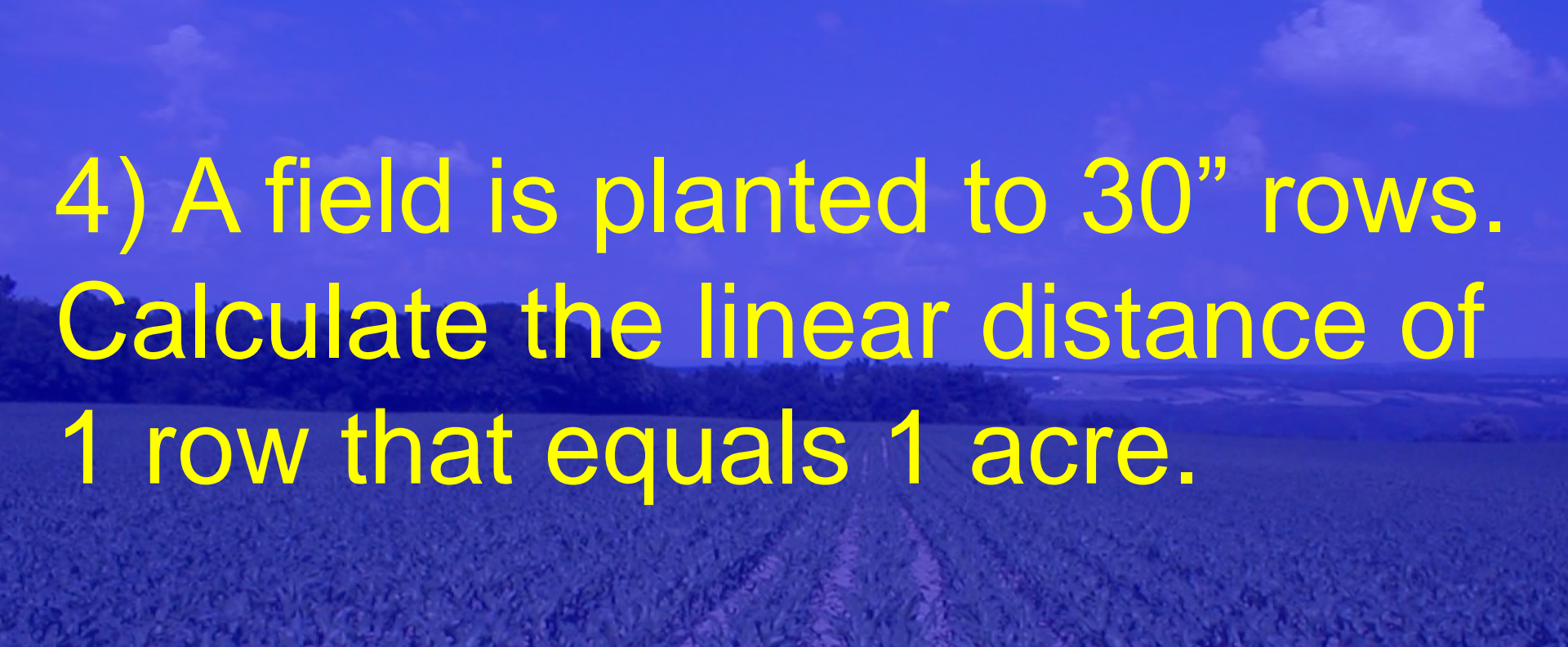
3) Corn that is grown for silage
vs. grain requires:

a) similar

b) higher

c) lower

plant populations for maximum
yields.



4) A field is planted to 30" rows.
Calculate the linear distance of
1 row that equals 1 acre.



17,424 ft.

5) You count 30, 28, 35, and 32 corn plants in four 20' sections in a corn field.

Your estimated plant population is (plants/acre)

a) 32,775

b) 27,225

c) 30,000

d) 25,575

6) Crop rotations usually result in:

- a) higher yields of all crops in the rotation.
- b) a disruption in pest cycles.
- c) a diversification of economic risk.
- d) all of the above.

Trouble Shooting Emergence Issue

You are called to a farm for a low emerged plant population in corn.

The farm wants to know

- what caused the low population?
- and if they should replant?

Trouble Shooting Emergence Issue

What questions should you ask?

- Leftover Seed from last year
- Seeding Rate
- Planting Speed
- Type of Planter (Conv. Or No-till)
- Fertilizer application method
 - Fertilizer analysis and rate
- Has Herbicide been applied

Trouble Shooting Emergence Issue

What should you look for in field?

- Seed depth
- Un-germinated seeds in furrow
- Pest Damage
- Consistency in spacing of emerged plants
- Patterns

Trouble Shooting Emergence Issue

You take several stand measurements and find that the average plant population is 17,500 plants/acre.

Should they replant?

A farmer calls you and ask you to help him/her strategize how to implement no-till practices on their farm?

What considerations should you review with the farm.

***TELL THEM EVERYTHING
THAT CAN GO WRONG***

Transition to No-till

- **Soil Types**
- **Planter setup**
 - **Surface trash**
 - **Down pressure**
 - **Closing wheels**
- **Field Equipment**
 - **Manure application method**

Disadvantages of a no-tillage system

1. Cooler spring soil temperatures so corn and soybeans get off to a slower start.
2. Wetter soils in spring on soil with drainage problems.
3. Can increase pest problems.
4. Increased soil strength can inhibit early-season root growth on poorly structured soils
In dry springs
5. Delays crop development so corn may be wetter at harvest so higher grain-drying costs.

Advantages of a no-tillage system

1. Reduces soil erosion.
2. Reduces fuel, machine, and labor costs.
3. Improves soil moisture.
4. Saves time
5. Reduces soil crusting so can be advantage for stand establishment for soybeans.
6. Traps snow in winter wheat fields so better protection of the crown.

Soybeans

A farm is interested in growing soybeans for the first time.

What should they consider in preparation?

Soybeans

- Soil pH
- Field Surface conditions
- Soil Drainage
- Inoculation
- Harvest Plan