

Feed / Nutrition Practicum – 20 Points

Use the information provided to answer the questions. You will need to complete some calculations to find the answers. Record all answers on the answer sheet.

Diet Information for Production Group 2 (information is per cow):

Animal Information		Production Information	
Class	Lactating	Target Milk Weight lbs	60.00
Subclass	Milking	Milk Fat %	3.80
Breed	Holstein	Crude Protein	3.20
Body Weight	1,351	Days in Milk	150.00
Number of Animals	1		

Ingredient	As Fed, lbs	Dry Matter, lbs
Milk Cow Hay	1.00	0.85
Haylage 20 x 70 Silo, 40 DM	26.25	10.50
Corn Silage Ag Bag, 35 DM	46.43	
Total Forage	73.68	
High Moisture Corn, 74 DM	10.95	8.10
Custom Grain Concentrate	13.85	12.50
Total Concentrate	24.80	20.60
Total Ration		

Questions to Answer:

1. Animals fed this ration are in what stage of lactation? (2 Points)
 - A. Early Lactation
 - B. Mid to Late Lactation
 - C. Dry

2. What tool could be used to measure the particle length of feeds in the ration? (2 Points)
 - A. Kernel Processor
 - B. Koster Tester
 - C. NIR
 - D. Penn State Shaker Box

3. A minimum of how many inches of feed should be removed from the upright silo of haylage each day to maintain quality feed? (2 Points)
 - A. 3-4 inches
 - B. 13-14 inches
 - C. 23- 24 inches
 - D. No minimum

4. How long should this TMR be mixed before it is fed to the cows? (2 Points)
- A. 30 seconds – 1 minute
 - B. 3 – 5 minutes
 - C. 6 – 8 minutes
 - D. 10 – 12 minutes
5. Calculate the Dry Matter value for Corn Silage. Write the value with TWO decimals on the answer sheet. (4 Points)
- $(46.43 \times .35 = 16.25)$
6. How many TOTAL pounds of feed are in the ration AS FED? (4 Points)
- A. 52.55 lbs
 - B. 76.43 lbs
 - C. 97.03 lbs
 - D. 98.48 lbs
7. If this production group has 50 cows, how many total pounds of corn silage AS FED are needed each day? Write the value with TWO decimals on the answer sheet. (2 Points)
- $(46.43 \times 50 = 2,321.50 \text{ lbs})$
8. What percentage of the total feed should be left in the bunk after 24 hours (Rate of Refusal)? (2 Points)
- A. 0 %
 - B. 3 %
 - C. 6 %
 - D. 9 %