

**2015 Senior Dairy Quiz Bowl Questions**

**Round 05**

**Phase B**

**5 Questions**

**Correct answers are worth 10 points each.**

**Only the team being asked the questions is to be in the room. Each team will be asked these 5 questions. Answers are to be given by a team captain, but assistance may come from any team member. A question may be repeated only once. Answers must be started within 20 seconds. Partial credit may be given at the discretion of the judges. After one team has been questioned, the other team will enter the contest room and be asked the same 5 questions.**

1. Which one of the following best describes the lining of the reticulum?

- a) honeycomb
- b) covered with papillae for nutrient absorption
- c) a mucous covered lining to protect it from the hydrochloric acid that is secreted

**ANS: a) honeycomb**

2. Write this down: Calculate your heifer's average daily gain (ADG) if she weighs 75 pounds at birth and 350 pounds at 200 days of age.

**ANS: 1.375 pounds per day ADG**

Calculation: 350 pounds minus 75 pounds birth weight = 275 pounds of gain; 275 pounds of gain divided by 200 days of age = 1.375 pounds ADG

3. During digestion, what does the enzyme lipase do?

- a) breaks down carbohydrates
- b) breaks down protein
- c) breaks down fat (or lipids)

**ANS: c) breaks down fat (or lipids)**

4. Milk should be cooled to what temperature within 30 minutes after milking is completed?

- a) 50 ° F
- b) 38° F
- c) 20° F
- d) 15 ° F

**ANS: b) 38° F**

5. What milk component content is determined using the milk cryoscope test?

- a) protein
- b) fat
- c) water
- d) carbohydrate

**ANS: c) water**

**Phase C20 Questions**

**Correct answers are worth 15 points each.**

**Both teams are in the room for Phase C. The first contestant to signal will answer the question within 5 seconds after being acknowledged by the moderator. Failure to do so will cost that team 10 points. Any contestant answering a question without being acknowledged by the moderator will lose 10 points. If an answer is incorrect, members of the other team will have the opportunity to answer the question without having it reread except for true/false, either or and yes or no type questions. If an answer is given in these types of questions, the question will be replaced with a tie breaker question, and given to the other team. No points are deducted for giving an incorrect answer. Team members are not allowed to discuss the answers in this phase. No partial credit is available in Phase C, except for bonus questions. If neither team can offer an answer to the question within 10 seconds, the moderator will give the answer and the question will be dropped but neither team will forfeit points.**

1. What is the name of the enzyme that is added to milk to make cheese?

**ANS: Rennet**

2. Typical milking unit inflations have a useful life of about how many milkings?

a) 100      b) 250      c) 500      d) 1200

**ANS: d) 1200**

3. Most A.I. organizations recommend that inseminators should place semen in this section of the reproductive tract:

a) cervix      b) uterine body      c) uterine horn      d) fallopian tube

**ANS: b) uterine body**

4. In a high producing, early lactation dairy cow, what happens to her body weight when she enters a negative energy balance phase?

**ANS: It decreases**

5. Which of the following best describes Klebsiella?

- a) a mastitis causing bacteria                      b) a respiratory disorder                      c) a hoof infection  
d) a feed additive

**ANS: a) a mastitis causing bacteria**

6. What is the common name of the condition when the pH of the rumen drops to a low level?

**ANS: acidosis**

7. Before starting the Ovsynch program, cows are given two injections of which one of the following during the Presynch phase?

- a) prostaglandin                      b) GnRH                      c) adrenaline                      d) oxytocin

**ANS: a) prostaglandin**

8. What is the name of the volatile fatty acid (VFA) produced in the rumen that is used to form glucose?

**ANS: Propionate**

9. Which of the following is not a good source of energy for dairy cows?

- a) corn grain                      b) corn gluten feed                      c) fish meal                      d) barley grain

**ANS: c) fish meal**

10. During nutrient metabolism, what is the term for a protein that acts as a catalyst in starting or speeding up certain chemical reactions?

**ANS: enzyme**

11. Gossypol is a toxic pigment that can be found in which one of the following:

- a) corn grain                      b) alfalfa hay                      c) whole cottonseed                      d) wheat silage

**ANS: c) whole cottonseed**

12. What is the technical term for the class of chemicals used to kill internal parasites in cattle?

**ANS: Anthelmintics (also accept dewormers)**

13. Bovine spongiform encephalopathy or BSE is more commonly known as what disease?

**ANS: Mad Cow Disease**

14. What substance can increase to toxic levels in the lower section of the corn plant stalk during a prolonged period of drought?

**ANS: Nitrate**

15. What is the time period called after calving (abbreviated VWP) when you choose not to breed a cow?

**ANS: Voluntary Waiting Period**

16. In reference to milk production records, what does M.E. stand for?

**ANS: Mature Equivalent**

17. Why should a teat dip be used after milking?

**ANS: To reduce or prevent udder infections (mastitis)**

18. There are 9 kilocalories of energy provided in one gram of:

a) protein      b) carbohydrate      c) fat      d) water

**ANS: c) fat**

19. Which section of the reproductive tract does the A.I. inseminating rod pass through just before the semen is deposited?

**ANS: cervix**

20. Which class is Grade A milk that is used for fluid consumption assigned?

a) Class 1      b) Class 2      c) Class 3      d) Class 4

**ANS: a) Class 1**

**Bonus Questions**      **Each bonus question is worth 20 points.**

**Bonus questions may be earned in the toss up round. To receive a bonus question, 3 different team members must correctly answer the toss up questions. Bonus questions are not passed to the other team, nor are points deducted for an incomplete or incorrect answer to the question. Bonus question will be asked whenever 3 team members have answered toss up questions correctly with the count kept individually for both teams within a match. Eligibility for bonus questions does not carry over to another match. The answers must come from the team captain but assistance can come from the other team members. Only the number or answers required by the bonus question will be accepted. Example: If the bonus has a four part answer the first four answers given by the team will be accepted. Answers to a bonus question must start within 20 seconds and be completed within 60 seconds.**

1. The official placing on a class of cows is 3-4-2-1 with cuts of 4-4-5. Your placing is 4-3-1-2. Calculate your score.

**ANS: 41**

2. What is the most costly disease affecting the dairy industry?

**ANS: Mastitis**

3. What is the minimum amount of silage that should be removed from the exposed surface of a trench silo each day to prevent spoilage?

a) 2 inches      b) 6 inches      c) 12 inches      d) 24 inches

**ANS: b) 6 inches**