

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. What is the average duration of standing heat in a dairy cow?

- a) 6-12 hours b) 12-18 hours
c) 18-24 hours d) 24-36 hours

ANS: b) 12-18 hours

2. When formulating rations, nitrogen is a major consideration for dairy nutritionists. Which one of the following is the primary source of nitrogen that is added to the ration?

- a) water b) crude protein c) limestone d) supplemental fat

ANS: b) crude protein

3. Which breed of dairy cow produces milk that has a golden color?

ANS: Guernsey

4. Which of the following is the term for a completely hydrogenated fat that contains no double bonds?

- a) unsaturated fat b) saturated fat c) vegetable oil

ANS: b) saturated fat

5. In the reproductive system of a dairy cow, progesterone is the name of the hormone that is secreted by the structure often called a "yellow body". Which of the following is the proper name for this "yellow body"?

- a) cervix b) ovary c) follicle d) corpus luteum

ANS: d) corpus luteum

Phase C 20 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 percentage of normal whole milk is water?

- a) 97.5% b) 87.5% c) 79.5%

ANS: b) 87.5%

2. Lag time or the time from stripping teats to putting on the units is the most important part of the milking routine. The goal is to get the teat cups on in how many seconds after stripping?

- a) 1 to 1 ½ minutes b) 3 to 4 minutes c) 5 to 6 minutes

ANS: a) 1 to 1 ½ minutes

3. You notice that the milk somatic cell counts are increasing in your herd. What disease problem does this indicate?

ANS: mastitis

4. In which U.S. state was this country's first BSE case reported?

- a) Vermont b) Iowa c) Washington d) California

ANS: c) Washington

5. As corn silage ferments properly in the silo, what happens to the pH of the silage?

- a) it increases b) it decreases c) it does not change

ANS: b) it decreases

6. When a calf is born, the normal delivery position is:

- a) back feet first b) head first, then the front feet c) front feet first, then the head

ANS: c) front feet first, then the head

7. What condition can be prevented by feeding the additive Poloxalene?

ANS: Bloat

8. What is the minimum legal butterfat percentage found in processed whole milk?

- a) 2% b) 3.25% c) 3.75% d) 4%

ANS: 3.25%

9. What term describes the process of stopping the feeding of milk to a calf?

ANS: weaning

10. Using a scale 1 to 5, what should a dry cow's body condition score be?

- a) 1.5 to 2.0 b) 2.5 to 3.0 c) 3.5 to 4.0

ANS: c) 3.5 to 4.0

11. Which of the following normally happens to the body weight of a lactating dairy cow in late lactation?

- a) the cow should gain weight b) the cow loses weight
c) her weight remains the same

ANS: a) the cow should gain weight

12. How old should the average well-grown Holstein heifer be when she is bred?

- a) 8-12 months b) 13-15 months c) 16-18 months d) 22-24 months

ANS: b) 13-15 months

13. Which of the following is the best sign that a cow is in heat?

- a) bellowing b) she won't come in the milking parlor c) she stands to be mounted

ANS: c) she stands to be mounted

14. Which of the following is a warm season or C4 grass?

- a) fescue b) alfalfa c) bermuda d) orchardgrass

ANS: c) bermuda

15. When comparing bulls for artificial insemination, what does ERCR stand for:

ANS: Estimated Relative Conception Rate

16. What does anestrus mean?

- a) the cow is in heat b) sterility c) failure to show signs of heat

ANS: c) failure to show signs of heat

17. 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

18. What is the term for the disease "brucellosis" when it affects humans?

ANS: undulant fever

19. Which of the following dry period lengths will maximize milk production in the following lactation?

- a) 90 days b) 60 days c) 30 days d) 10 days

ANS: b) 60 days

20. What is the name of the first milk produced by the cow immediately after calving that contains immunoglobulins (antibodies)?

ANS: Colostrum

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. On average, cows have a flight zone of how many feet?

- a) 1 foot b) 5 feet c) 12 feet d) 20 feet

ANS: b) 5 feet

2. On a dairy ration printout, which of the following refers to the energy level in the ration?

- a) CP b) NE_L and TDN c) RUP

ANS: b) NE_L and TDN

3. What is a fat source called that is either chemically treated or physically encapsulated so that it is not degraded in the rumen, but is still available for digestion in the small intestine?

ANS: Rumen-protected or rumen-inert