

### Bovine Palpation Competition Rules.

Reviewed on January 18<sup>th</sup> 2019 by Theriogenologists at University of Georgia, College of Veterinary Medicine:

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#### Part 1: General Rules

- a) The competition will be coordinated and judged by faculty members (ACT board certified) of the hosting school, with the support of the SFT-ACT committee.
- b) Each school is allowed to have a team with a maximum of five students consisting of four team members and an alternate. Teams with four students can earn the maximum amount of points. In a five person team, the lowest score will be dropped. Teams with less than four students cannot obtain full points.
- c) If fewer than 10 schools sign up for the competition, the remaining spots can be filled with second school teams.
- d) The competition will be open to first, second, and third year veterinary students.
- e) Students are expected to adhere to the honor code and report any violations which includes cheating or manipulating of test materials. The entire team will be disqualified in the event of an honor code violation.
- f) Host schools will not be allowed to compete for awards, but they may use the competition as a practice opportunity for their own team.
- g) At all times, the host school and students in the competition will prioritize cow welfare.
- h) The cows used in the competition must be dairy cattle to ensure student safety and animal welfare.
- i) The written exam and lab practicum will cover both beef and dairy cattle.
- j) Students that have traveled outside of the United States and Canada, must be on United States soil for five days before entering farms and large animal hospitals during the competition.

#### Part 2: Competition Format

##### *Section 1: Written Exam*

- a) Students will be given a 50 question exam to complete individually in two hours.
- b) The exam will cover all aspects of beef and dairy reproduction and include topics such as the estrous cycle, male and female reproductive anatomy, gestation, parturition, reproductive diseases, advanced reproduction techniques, pregnancy diagnosis, fetal aging, and synchronization.

- c) The question format will be determined by the host school. The competitors must be given their results and the answer key by 6 pm on the day of the exam.
- d) If an exam question is being contested by one of the students, they must notify an exam proctor before leaving the exam room. The faculty member that wrote the exam will have the final say on exam answers.
- e) Questions may be a mix of multiple choice, true/false, and short answer. There will be no essay questions.
- f) The exam must be written by a faculty member that is a diplomate of the American College of Theriogenologists.
- g) The exam will be reviewed by members of the ACT-SFT palpation competition committee before the competition occurs to promote continuity in exams.
- h) At the time of the exam, a faculty member must be available to answer questions.
- i) All teammates will be allowed to take the written examination.
- j) All members of the top 10 teams will move on to the lab practicum.

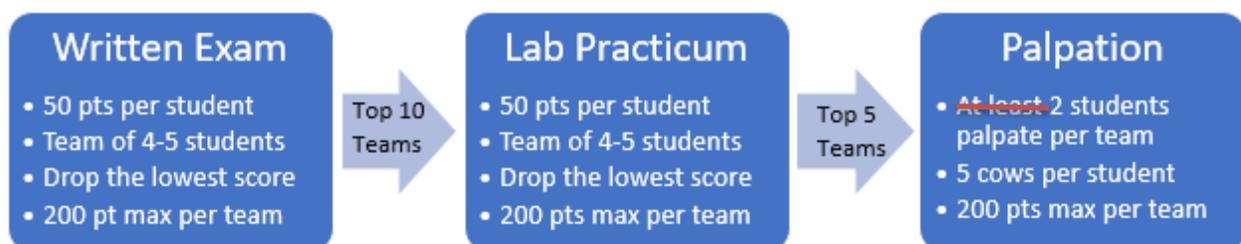
### *Section 2: Lab Practicum*

- a) Students will be given a one hour practical lab examination worth 50 points.
- b) The number of stations maybe determined by the host school, but a minimum of 10-20 stations is preferred.
- c) The majority of the stations will consist of pregnancy diagnosis and fetal aging using preserved reproductive tracts.
- d) In addition to reproductive tracts, stations may consist of video recordings, instruments, equipment, models, placentas, fetuses, microscope slides, etc. The content of these stations will be up to the discretion of the host school.
- e) Depending on the number of students and the size of the room, the host school can divide students into groups for the lab practicum.
- f) Students are advised to handle specimens with care to ensure that there are no changes in specimen quality for subsequent groups.
- g) Answers to fetal age questions must be given in days.
- h) Once all students have completed the exam, a theriogenologist will estimate the gestational ages of the fetuses using crown to rump length.
- i) Scoring breakdown for reproductive tracts in lab practicum:
  - i) Open
    - 1) Full points for correct answer only
  - ii) Pregnant
    - 1) Full points for +/- 5 days of crown-rump length age
    - 2) Half of the points for +/- 10 days of crown-rump length age
  - iii) Students must be given their scores and an answer key by 6 pm.
- j) The top 5 teams will move on to the palpation round.

### *Section 3: Rectal Palpation*

- a) Two students from each of the top teams will compete in the palpation round to ensure that there is a team component to each round.
- b) Teams can choose which students they send to the palpation round. They should keep in mind that students who do not compete in the palpation round will not be considered for individual awards.
- c) Each team can earn a maximum of 200 points in this round
- d) Since the 2 student scoring scenario will be used for this competition, each student may earn a maximum score of 50 points. The team score will be doubled to reach the maximum of 200 points.
- e) Each student will palpate 5 cows and answer the following questions:
  - i) Is the reproductive tract palpably normal?
  - ii) Is the cow pregnant or not pregnant?
  - iii) If pregnant, how many days?
    - 1) The host school will provide cows for students in any of these categories:
      - (a) 45 days (40-50 days)
      - (b) 60 days (55-65 days)
      - (c) 75 days (70-80 days)
      - (d) 90-120 days
      - (e) Soon to be dry or dry (7-9 months)
  - iv) If not pregnant:
    - 1) Is the uterus fully involuted or is the cow recently fresh?
    - 2) Are there any structures on the ovaries?
    - 3) If yes, name the structure.
    - 4) If yes, is it on the left or right ovary?
- f) Scoring breakdown for palpation questions:
  - i) 10 points for each of the five cows
  - ii) Open Cow
    - 1) 1 point palpably normal
    - 2) 3 points for correct diagnosis of open
    - 3) 3 points for involuted or not
    - 4) 3 points for ovarian structures- presence/absence and right/ left
      - (a) If the side is correct, but the structure incorrect, 1.5 points will be awarded
      - (b) If the side is incorrect, regardless of the structure, 0 points will be awarded
  - iii) Pregnant Cow
    - 1) 1 point palpably normal
    - 2) 3 points for open vs. pregnant

- 3) 6 points for correct days category
- iv) Cow with pathology (i.e. cystic ovary)
  - 1) 2 points for palpably normal or not
  - 2) 8 points correct description of abnormality
- g) All students will palpate 5 cows at various stages in gestation. The host school does not have to provide a cow in each of the gestation categories. For example, they can provide two open, one 45 day, one 90 day, and one dry cow. This will be determined by the cows available to the host school.
- h) The host school must provide even (fair) distribution of cows of different reproductive categories to each of the students. For example, it is unfair to give one student 5 open cows and another student a variety of cows.
- i) Cows that are less than 40 days pregnant are not allowed to be used.
- j) After palpating, students will show their sleeve to a veterinarian supervising the contest. If the veterinarian finds blood on the sleeve, the cow will be removed from the competition. The supervisor will also assess the cow's behavior and remove cows as needed.
- k) If students notice blood on their palpation sleeves, they must notify an exam proctor from the host school immediately. The cow will be removed from the contest and replaced with a cow at the same stage of gestation.
- l) Each student will have 10 minutes to palpate the cow, write down their answers in the palpation exam sheet, and show their sleeves to the supervisors.
- m) If a cow is mistreated by a contestant, their team will be disqualified.
- n) A maximum of 3 students are allowed to palpate the same cow.



### Part 3: Scoring

- a) For each team, the top four individual scores will count towards the team point total. The fifth score will be dropped. Teams of less than five will not have the benefit of a dropped score.

- b) All three rounds of the competition will count towards the overall point total.
- c) In round one and two, each student can earn a maximum of 50 points. The team can earn a maximum of 200 points in each round.
- d) The third round scoring system will have a 200 point maximum. Each student can obtain a maximum of 50 points, and the team score will be doubled.
- e) The team scores from each round will be totaled for a maximum of 600 points per team. The team with the highest point total will win the competition.
- f) All teams that compete in the palpation round will be ranked and announced at the SAVMA banquet.
- g) The top three individuals, based on their total individual scores, will be announced at the banquet. All three students must have competed in the live palpation round and can be from the same team.
- h) In the event of tie scores:
  - i) The team/individual with the highest point total in the palpation round will win.
  - ii) If that does not break the tie, the team/individual with the most lab practicum points will win.
  - iii) If necessary, ties will be broken based on which student was closer to the official gestation dates in the palpation and lab practicum. This will be calculated by adding up the total days off for each cow or tract. The student with the lowest number of days will win.