

Mississippi Master Cattle Producer Program

Breeding and Genetics Certification Exam



Contact Name

Address

Street

City

State Zip Code

Phone E-mail Address

Multiple-choice questions: Select the letter of the correct answer.

1. Which of the following would be a contemporary group?

- a. bulls and heifers, raised together
- b. heifers from spring and fall calf crops
- c. heifers, same age group, managed same
- d. bulls in same calf crop, some creep fed

2. Bull A has a weaning weight EPD of +25. Bull B has a weaning weight EPD of +35. Compared to calves sired by Bull A, calves sired by Bull B can be expected to weigh...

- a. 35 pounds heavier at weaning on average
- b. 10 pounds heavier at weaning on average
- c. 10 pounds heavier at weaning in all cases
- d. 10 pounds heavier at yearling age on average

3. A bull that ratios 5% above the average of his contemporary group for adjusted yearling weight would have the following adjusted yearling weight ratio...

- a. 5
- b. 95
- c. 100
- d. 105

4. Adjusted weights take into account _____, _____, and _____.

- a. postpartum interval, age of dam, pasture
- b. calf age, management, age of sire
- c. milk production, frame size, calf age
- d. calf age, management, age of dam

5. Which of the following accuracy values indicates the most reliable EPD value?

- a. 0.05
- b. 0.30
- c. 0.65
- d. 0.80

6. The ability of a crossbred dam to produce more and heavier offspring is called _____.

- a. maternal heterosis
- b. individual hybrid vigor
- c. paternal heterosis
- d. heritability

7. In a terminal crossbreeding system...

- a. replacement heifers are produced
- b. individual heterosis of calves produced is low
- c. milk EPDs of terminal sires are critical
- d. all calves are marketed

8. Which of the following economically important traits would respond best to genetic selection?

- a. calving ease
- b. fertility
- c. ribeye area
- d. yearling weight

9. Too much or too little angle or set at the hocks of a bull's rear legs can cause...

- a. short stature
- b. screwclaw
- c. smooth strides covering tracks
- d. joint wear and arthritis leading to lameness

10. Which of the following is not another name for the milk and growth EPD?

- a. milk yield EPD
- b. maternal weaning weight EPD
- c. total weaning weight EPD
- d. combined maternal EPD

11. The EPD that reflects the relative ease which a bull's calves are born to first-calf heifers compared to all other bulls evaluated in a breed is _____.

- a. direct calving ease
- b. maternal calving ease
- c. birth weight
- d. gestation length

12. Phenotype refers to _____.

- a. true breeding value
- b. what we see or measure
- c. environment
- d. genotype

13. _____ in breeding animals at yearling age can predict progeny carcass characteristics.

- a. Rectal palpation
- b. Ultrasound measurements
- c. Body condition scores
- d. Pelvic measurements

14. A practical use of DNA fingerprinting is _____.

- a. animal identification
- b. to improve bovine embryo harvest and storage
- c. to correct growth performance problems
- d. sex control

15. _____ overcome the weakness inherent in generalized selection indexes by allowing users to enter custom data instead of using data designed for use across multiple breeders/producers.

- a. Adjusted weights
- b. Interactive decision support tools
- c. Marker-assisted expected progeny differences
- d. Customized DNA SNPs

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