

THE NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF AGRICULTURE

DEPARTMENT OF ANIMAL SCIENCE

B.Sc. AGRICULTURE (ANIMAL SCIENCE)

ANS 3506: EQUINE PRODUCTION AND MANAGEMENT

FIRST SEMESTER FINAL EXAMINATION

JANUARY 2024

MARKS: 100

TIME: 3 HOURS

INSTRUCTIONS:

1. Answer all the questions
2. Number your answers correctly
3. Begin every question on a new page

Question 1

- (a) Define the following terms as used in Equine Production and Management:
- (i) Colt [2]
 - (ii) Weanling [2]
 - (iii) Gelding [2]
- (b) As an Animal Scientist, the Department of Livestock Services has requested you to draft a document that will assist and direct horse owners in appreciating horses. [10]
- (c) Briefly discuss the effects brought by domestication of equines by humans. [4]

Question 2

- (a) Explain the importance of the following factors that are used when selecting a horse:
- (i) Conformation [3]
 - (ii) Soundness [3]
- (b) Write short notes on the following:
- (i) Cold blooded horses [4]
 - (ii) Light horses [4]
- (c) A farmer wants to perform different management practices including; oral administration of medicine, hoof trimming and applying tick grease around hind legs. Which restraint method(s) is/are suitable to carry out these practices and why? [6]

Question 3

- (a) Briefly discuss the digestion of roughages in the horse's stomach. [7]
- (b) During community outreach you noticed a stallion living in a confined space and being supplied with feeds *ad libitum*, briefly outline the possible effects that could be caused by that. [3]

(c) As an animal scientist you are asked to advise the horse producer on feeding strategy on his horse during the following gestation periods:

(i) Mid-trimester [5]

(ii) Last trimester [5]

Question 4

(a) A farmer bought a stallion for breeding purpose, however during mating the farmer noticed a stallion's semen mixed with urine. Clearly indicate the cause of this problem. [3]

(b) Discuss the physiology and anatomy of the following male reproductive parts:

(i) Tunica albuginea [4]

(ii) Tunica vaginalis [3]

(c) During foaling, the horse producer discovered that the uterus and foetal membranes have been pulled out through the vagina. Discuss the cause of this situation. [5]

(d) As the horse breeder, you notice that your mare is about to give birth in few hours. Briefly narrate the safety measures to follow for safe delivery of the foal. [5]

Question 5

(a) The Farm Manager asked you to provide a procedure and to assess the body condition of the horse pictured in Figure 1. [10]



Figure 1: A horse

(b) Explain the importance of the following management practices in equines:

- (i)** Grooming [4]
- (ii)** Hoof trimming [3]
- (iii)** Castration [3]