



MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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University Examinations 2012/2013

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURE

ANS 0232: ANIMAL BREEDING & NUTRITION

DATE: DECEMBER 2012

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question **ONE** and any other **TWO** questions

QUESTION ONE – 30 MARKS

- (a) Name 5 functions of vitamins in animal bodies. (5Marks)
- (b) Discuss 5 functions of water in animal bodies. (5Marks)
- (c) Name 2 (nutrients) possible deficiency causes of anaemia in animals. (2Marks)
- (d) Name 5 ration functions (5Marks)
- (e) Name 5 products of rumen digestion (5Marks)
- (f) Explain the following terms: (8Marks)
 - (i) Embryo transfer
 - (ii) Progeny testing
 - (iii) Selection
 - (iv) Sex-linked traits

QUESTION TWO – 15 MARKS

- (a) Define the following terms: (5Marks)
 - (i) Heritability
 - (ii) Alleles
 - (iii) Codominance
 - (iv) Gene
 - (v) Cross-over
- (b) Name 2 nutrients deficiencies which are likely causes of low fertility/reproductive failure (2Marks)
- (c) Discuss 3 ways of improving nutritive value of roughages. (3Marks)
- (d) Name 2 uses of cross-breeding. (2Marks)
- (e) Explain one reason why in-breeding is practised. (2Mark)

(f) Name one disadvantage of in-breeding. (1Mark)

QUESTION THREE – 15 MARKS

- (a) Name 2 nutrient deficiencies which are likely causes of retarded growth. (2Marks)
- (b) Name 4 main sources of animal feed stuffs. (4Marks)
- (c) Explain what is hybrid vigour (2Marks)
- (d) Explain what is
- (i) Straight breeding
 - (ii) Cross breeding (4Marks)
- (e) Explain 3 ways of improving roughage digestibility (3Marks)

QUESTION FOUR – 15 MARKS

- (a) Explain 4 concerns of using non-nutritive feed additives. (4Marks)
- (b) Explain 2 differences between meiosis and mitosis (4Marks)
- (c) Name 1 source of phenotypic difference among animals. (1Mark)
- (d) Name 2 source of genetic variation. (1Mark)
- (e) Name 3 disadvantages of artificial insemination (A.I) (3Marks)

QUESTION FIVE – 15 MARKS

- (a) Name 4 types non-nutritive feed additives. (4Marks)
- (b) Name 2 variations of cross breeding. (2Marks)
- (c) Name 3 methods of balancing rations. (3Marks)
- (d) Discuss 4 factors that affect feed intake. (4Marks)
- (e) Explain the following terms:
- (i) Genotype
 - (ii) Genetics (2Marks)