



Uva Wellassa University of Sri Lanka
Faculty of Animal Science & Export Agriculture

B.ASc. Degree Programme
Year II Semester II
End Semester Examination – June/ July 2010

ANS 231-2 Selection and Animal Breeding Techniques – Repeat Examination
Essay (Section II)

Instructions

Answer all questions in Section II in booklet provided.

No. of questions : Two (02)
No. of pages : Two (02)
Time : One hour (01 hr.)
Total marks allocated : 60%

1.

- a) Briefly explain why a farmer should focus on breeding methods in order to improve economic traits of farm animals

(50 marks)

- b) Milk production records of five (05) cows are given below

Cow	Milk yield (l/year)
1001	4,000
1002	3,600
1003	2,900
1004	3,200
1005	4,300

Calculate the Breeding value (BV) by assuming that the h^2 for milk yield is 0.3 and herd average is 3600

(50 marks)

2.

i) In a population of dairy cattle following parameters were calculated for milk yield

$$V_P = 15,000 \text{ l}$$

$$V_E = 4,000 \text{ l}$$

$$V_I = 2,500 \text{ l}$$

$$V_D = 2,600 \text{ l}$$

- a) Calculate the **Additive genetic variance (V_A)**.
- b) Calculate the **Narrow sense heritability**.
- c) Calculate the **Broad sense heritability**.

(40 marks)

ii) Write short notes on,

- a) **Traditional Breed Structure**
- b) **Tendom selection method**

(30 marks)

(30 marks)

[End of Section II]