# THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY FIRST SEMESTER FINAL EXAMINATION –2021 DEPARTMENT OF AGRICULTURE – 3<sup>RD</sup> YEAR DEGREE AG 321 – ANIMAL MANAGEMENT II TIME ALLOWED:- 3 HOURS. TOTAL MARKS = 100

# **INFORMATION FOR CANDIDATES:**

- 1. You have 10 minutes to read the paper. You must not begin writing during this time
- 2. This exam paper has a total of 5 questions on 7 pages (including front page).
- 3. Answer any 4 questions only
- 4. All answers must be written in the answer book. No other written material will be accepted for marking.
- 5. This is a closed book exam. Slide rules, calculators and log tables are permitted in the examination room. Notes, textbooks and other recording devices (e.g. mobile phones) are not allowed
- 6. Write your name and number clearly on the front page of the answer book. Do it now.
- 7. Marks for each question are shown in each section. Total mark is 100.

# **Question 1 (25)**

- a) Define the following terms related to beef cattle: (1 each)
- i. Bullock:
- ii. Marbling
- iii. Steer
- iv. Weaning.
- v. Turn off rate
- vi. Genotype by environment (GxE) interaction.
- vii. Flight zone.
- b) Write down the names of any four breeds or genotypes of beef cattle in PNG. (6)
- c) Write down the names of any three beef cattle research stations in PNG (past and present) (6)
- d) Write down the name of the types of feeds given to beef cattle on the ranches in PNG. (6)

# Question 2 (25)

- a) In early 1970's a national smallholder cattle development project was implemented by the government with funding from the World Bank. List any four causes of decline of this project. (9)
  - b) Why is it necessary to carry out castration on beef cattle? (8)
- c) What can you do to ensure your own occupational health and safety when castrating cattle? (8)

#### Question 3 (25)

- a) Briefly describe the lactation cycle of a typical commercial dairy cow. (13)
- b) List any three things you can do ensure successful milking of dairy cows in a milking shed. (12)

# **Question 4** (25)

- a) Write down the names of any 3 major wool breeds of sheep and 3 major meat breeds of sheep (9)
- b) What is the main purpose of docking and drenching of sheep? (8)
- c) Describe any three main health issues which may arise when you graze sheep on pastures. (8)

# **Question 5** (25)

- a) List any 4 external parasites of goats (8)
- b) What are the effects of external parasites on goats? (8)
- c) What measures would you take to ensure safety when using pesticides to control external parasites on a goat farm? (9)

# **END**