



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
DEPARTMENT OF ANIMAL SCIENCE AND FISHERIES
2024 1 EXAMINATION

COURSE CODE: ANP 312
COURSE TITLE: INTRODUCTION TO GENETICS AND BREEDING
CREDIT UNIT: 2 CU
TOTAL SCORE: 70 MARKS
TIME ALLOWED: 2 Hours
INSTRUCTIONS: ATTEMPT QUESTION 1 (30 MARKS) AND ANY OTHER TWO (20 MARKS EACH)

Q1 Explain quantitative traits and state five features each of quantitative and qualitative traits (30 marks)

- Q2
- (a) Define RNA (2 marks)
 - (b) Name two types of RNA you know (4 marks)
 - (c) State two differences between RNA and DNA (10 marks)
 - (d) Explain briefly the synthesis of RNA (4 marks)

Q3 Write short notes on the following: (20 marks)

- a) Mass selection
- b) Family selection
- c) Tandem selection
- d) Independent culling levels

Q4 a) Repeatability measures the strength of the relationship between repeated records Discuss (10 marks)

- b) Discuss three traits each and their Repeatability (R) value for Cattle (dairy /beef) (10 marks)