



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI, ABUJA**

**Faculty of Agricultural Sciences**

**Department of Animal Science and Fisheries**

**2020\_2 Examination**

Course: ANP507: Animal Breeding And Livestock Improvement

Credit Unit: 2

Time Allowed: 2 hours.

**INSTRUCTIONS: Answer question one (Compulsory: 25 Marks) and any other THREE (15 marks each)**

**QUESTION ONE**

- i. Explain in your own words the meaning of performance testing in selection of Animal **3 marks**
- ii. Can you provide a list of heritable traits of Cattle Beef/milk productions, Horses, Swine Sheep and Poultry that can be easily and accurately measured? **22 mark**

**QUESTION TWO**

- i. Can you write a brief outline of performance testing that should be included in a progressive beef cattle breeder's program? **6 marks**
- ii. State the primary goal of seed stock producers? **5 marks**
- iii. Can you distinguish between seed stock producers and commercial performance testing programs? **4 marks**

**QUESTION THREE**

- i. Can you write a brief outline on the use of information on relatives in the selection of animal breeds? **5 marks**
- ii. What differences exist between the two different types of information on use of relatives in the selection of animal breeds? **10 marks**

#### QUESTION FOUR

Can you write a brief outline on the following types of selections?

- a) Natural selection 6 marks
- b) Artificial selection 9 marks

#### QUESTION FIVE

- i. Why is a selection generally more effective for highly heritable traits than for lowly heritable ones? 6 marks
- ii. Can you distinguish between recurrent selection, reciprocal recurrent selection and pedigree selection? 9 marks

#### QUESTION SIX

- i. Explain in your own words what is meant by production traits of an animal 3 marks
- ii. Describe a typical breeding design for a Progeny Testing Programme that can be implemented in smallholder production situations. 5 marks
- iii. Briefly explain Positional cloning 7 marks