



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
MARCH/APRIL 2016 EXAMINATION
SCHOOL OF AGRICULTURAL SCIENCES

COURSE : **ANP310** **(Genetics and Breeding)**

INSTRUCTION: Answer any four questions.

TIME: **2 Hours.**

1. (a) Discuss briefly some of the factors militating against the use of artificial insemination technique in Nigeria
(b) List any six types of cells
2. (a) What is outbreeding ?
(b) Differentiate between line breeding and upgrading
- 3.(a) Briefly discuss some of the factors that affect the effectiveness of selection in an animal improvement programme.
(b) Differentiate between complete and partial dominance in inheritance of characters by individuals
4. (a) How can plants that really produce seeds be propagated?
(b) Describe clone selection and hybridization methods of asexual propagation.
5. (a) What are clones?
(b) What are the major limitations of clone selection method?
(c) Give four examples of asexually propagated crops.
6. Define the following :
 - (i) Plant breeding
 - (ii) Pollination
 - (iii) Self pollination
 - (iv) Cross pollination
 - (v) Mutation
 - (vi) Additive genes

7. (a) What are nucleic acids?
- (b) List and state the functions of ribonucleic acids found in cells.
- (c) What is the relationship between cell, tissue and organ?