



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science

DEPARTMENT OF BIOLOGICAL SCIENCES

2024 1 EXAMINATION-

COURSE CODE: BIO 402

COURSE TITLE: CYTOGENETICS OF PLANTS

CREDIT: 2 Units

TIME ALLOWED: 2 Hours

Instructions: Attempt question number One (1) and any other TWO (2) questions. Question number one (1) carries (30) marks, while the other questions carry (20) marks each.

1. a). Write on the different Production of Monoploids;
 - i. Interspecific and Intergeneric Hybridization (10mks)
 - ii. Twin seedling (4mks)
 - iii. Anther and Pollen Culture (2mks)
 - iv. Chromosome Elimination (4mks)
- b). Explain dplication in chromosome mutation (10mks)
2. a). Write briefly on the size of chromosomes (12mks)
- b). Discuss the evolutionary significance of duplication (8mks)
3. a). Write exhaustively on Satellite Chromosomes (14mks)
- b). What is Aneuploid Series? (6mks)
4. Discuss deletion in chromosomal mutation (20mks)
5. Write succinctly on variation (20mks)