

EASTERN UNIVERSITY
THIRD YEAR/FIRST SEMESTER EXAMINATION
IN AGRICULTURE (2001/2002)

Plant Breeding and Techniques (AGB 3102)

Answer ALL questions

Time allowed: 03 hours

- 1.a). Discuss the pedigree method of selection used in the breeding of a self-pollinated crop.
b). How does bulk method of selection differ from this method?

2. Write accounts on the following
 - a) Centre of origin of crop species
 - b) Genetic resources and their importance

3. Outline the procedure of
 - a) Recurrent selection method to improve seed oil content in maize.
 - b) Screening varieties of cowpea against soil borne collar rot disease.

4. Explain
 - a) Environmental and hereditary variations
 - b) Male sterility and utilization

5. Give a detail description of the procedure to incorporate rust resistance in an adapted groundnut cultivar. Consider that rust resistance is governed by a pair of recessive genes.

6. Write short notes on
 - a) Self-incompatibility in crop plants
 - b) Acclimatization of crop varieties
 - c) Pollination practices adopted in field crops.