

ASUTOSH COLLEGE
DEPARTMENT OF BOTANY
B. Sc. HONOURS (BOTANY)
SEMESTER – IV (CBCS, UNDER C.U.)
BOTA-SEC-B (Plant Breeding)

Time: 1 hr

Full marks: 20

INTERNAL ASSESSMENT

1. Answer any **10** of the following in brief.

(2 x 10) = 20

- a) What is green revolution?
- b) What is primary centre of origin of a crop species?
- c) What is secondary plant introduction? Cite an example.
- d) What is germplasm?
- e) Describe two characteristic features of a hermaphrodite flower that facilitate self-pollination.
- f) What is a pure line?
- g) What is inbreeding depression? Why is it prominent in cross pollinated species?
- h) What is cytoplasmic-genetic male sterility in plants?
- i) Write two good qualities of a female/seed parent necessary for hybrid seed production.
- j) Name one selection method for improving asexually reproducing crops.
- k) In mutation breeding which progeny is more important for selection?
- l) In polyploid breeding which one is more preferable autopolyploidy or allopolyploidy? Give reason.
- m) What do you mean by MAS? Give examples of two types of molecular marker used in breeding.
- n) Give examples of interspecific and intergeneric hybridization used in crop improvement.
- o) Mention two techniques of gene transfer in plant system for transgenic production.