

Fundamentals of Plant Breeding	
Sl. No.	Topic of Assignment
1	Historical development in plant breeding
2	Nature and role of plant breeding
3	Modes of reproduction
4	Apomixis and its usage in plant breeding
5	Self- incompatibility in flowering plants
6	Male sterility in flowering plants
7	Domestication, acclimatization
8	Plant Introduction, types, procedure and importance
9	Centre of origin/diversity
10	Mass selection
11	Pureline selection
12	Hybridization techniques
13	Pedigree method
14	Bulk breeding method
15	Single seed descent method
16	Backcross breeding method
17	Multiline concept
18	Heterosis and its manifestations
19	Inbreeding depression
20	Development of inbred lines and hybrids
21	Composite varieties
22	Synthetic varieties
23	Clonal selection
24	Wide hybridization
25	Breeding methods for self-pollinated crops
26	Polyploidy breeding
27	Mutation breeding
28	Breeding for disease resistance
29	Breeding for insect resistance
30	Breeding for drought resistance
31	Breeding for salinity resistance
32	Breeding for oil Improvement
33	Breeding for protein Improvement
34	Ideotype breeding
35	Molecular markers
36	Marker Assisted Selection
37	Breeding methods for cross pollinated crops
38	Population Improvement techniques
39	Different selection methods
40	Hybrid, its types and development methods
41	Plant Tissue culture technique
42	Crop genetic resources
43	Systems of mating
44	Recurrent selection
45	Transgenic breeding
46	Varietal seed production
47	Maintenance breeding
48	Release of new varieties

49	Hybrid seed production
50	Intellectual property rights
51	Plant Breeders Right
52	Organisations for crop improvement in India
53	Recombinant DNA technology