

## Division of Plant Breeding & Genetics

### List of Courses UG/PG/Ph.D.

#### a) B. Sc Hons Agri. Programme

##### Semester-1

S.No.	Course title	Course No.	Credits hours
1	Fundamentals of Plant Breeding	GPBR-211	2+1
2	Crop Improvement-I ( <i>Kharif</i> crops)	GPBR-311	1+1
3	Intellectual Property Rights	GPBR-312	1+0

##### Semester-II

S.No.	Course title	Course No.	Credits hours
1	Fundamentals of Genetics	GPBR-121	2+1
2	Principles of Seed Technology	GPBR-221	1+2
3	Commercial Plant Breeding	GBR-222	1+2
4	Crop Improvement-II ( <i>Rabi</i> crops)	GPBR-321	1+1

#### b) M.Sc. (Genetics & Plant Breeding)

##### Semester I

S.No.	Course Title	Course No.	Credit hours
1	Principles of Genetics	GPB 501*	3(2+1)
2	Principles of Plant Breeding	GPB 502*	3(2+1)
3	Varietal Development and Maintenance Breeding	GPB 504	2(1+1)
4	Breeding for Quality and Special Traits	GPB 507	3(2+1)
5	Mutagenesis and Mutation Breeding	GPB 508	3(2+1)
6	Seed Production and Certification	GPB 510	2(1+1)
7	Crop Breeding-I ( <i>Kharif</i> Crops)	GPB 511	3(2+1)
8	Breeding Vegetable Crops	GPB 513	3(2+1)
9	Seminar	GPB 591	1(1+0)
10	Thesis/Research	GPB 599	-

## Semester II

S.No.	Course Title	Course No.	Credit hours
1	Fundamentals of Quantitative Genetics	GPB 503*	3(2+1)
2	Molecular Breeding and Bioinformatics	GPB 506*	3(2+1)
3	Breeding for Stress Resistance and Climate Change	GPB 516*	3(2+1)
4	Principles of Cytogenetics	GPB 505	3(2+1)
5	Hybrid Breeding	GPB 509	3(2+1)
6	Crop Breeding-II ( <i>Rabi</i> Crops)	GPB 512	3(2+1)
7	Breeding Fruit Crops	GPB 514	3(2+1)
8	Breeding Ornamental Crops	GPB 515	3(2+1)
9	Germplasm Characterization and Evaluation	GPB 517	2(1+1)
10	Genetic enhancement for PGR Utilization	GPB 518	2(1+1)
11	Seminar	GPB 591	1(1+0)
12	Thesis/Research	GPB 599	-

\*Core courses

### c) Ph.D. (Genetics & Plant Breeding)

#### Semester I

S.No	Course Title	Course No.	Credit
1	IPR and Regulatory Mechanism (e-course)	GPB 609*	1(1+0)
2	Advances in Biometrical Genetics	GPB 602	3(2+1)
3	Molecular Cytogenetics for Crop Improvement	GPB 603	2(2+0)
4	Plant Genetics Resources, Conservation and Utilization	GPB 604	2(2+0)
5	Breeding Designer Crops	GPB 608	2(1+1)
6	Seminar I/II	GPB 691/692	1(1+0)
7	Thesis/Research	GPB 699	-

#### Semester II

S.No	Course Title	Course No.	Credit
1	Advances in Plant Breeding Systems	GPB 601*	3(3+0)
2	Genomics in Plant Breeding	GPB 605*	3(3+0)
3	Population Genetics	GPB 606	2(2+0)
4	Crop Evolution	GPB 607	3(3+0)
5	Seminar I/II	GPB 691/692	1(1+0)
6	Thesis/Research	GPB 699	-

\*Core courses