

**Course name & Credit hrs.: Principles of Genetics [MGPB0501 (2-1-0)]****Assignments Topics**

<b>Sl. No</b>	<b>Reg No</b>	<b>Name</b>	<b>Topics</b>
1			Epigenetics and its applications in crop improvement
2			Telomerase activities
3			Pre-mendelian, mendelian and post mendelian concept of inheritance
4			Genome imprinting and its application in crop improvement
5			Transposable elements and its application in crop improvement
6			Mutation and its application in crop improvement
7			GM Crops: An Overview
8			Somatic cell genetics
9			Cisgenesis: An alternative tool for transgenesis
10			Transgenesis and its application in crop improvement
11			Mutation and molecular basis of mutation
12			Somatic cell genetics
13			Prospective of GM crops
14			Topoisomerase
15			Gene therapy and its application
16			CRISP-Cas-9 technology of gene editing
17			Reverse Genetic Approach
18			Apoptosis and its importance
<b>Internal-II (PPT) Topics</b>			
1			VIGS and its application in crop improvement
2			Phenomics in crop improvement
3			Programme cell death
4			Riboswitch and its application
5			Reverse genetics and its application in crop improvement
6			RNA Processing and its importance
7			Behavioural genetics
8			TILLING: A novel approach in crop improvement
9			CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats): A novel tool in crop improvement
10			Synthetic DNA
11			RNA Processing
12			TILLING: A novel approach in crop improvement.

13			Human Genome Project and its application
14			Next generation sequencing and its application in crop improvement
15			Gene silencing and its application in crop improvement
16			Polymerase chain reaction and its importance in crop improvement
17			Importance of chromosomal aberration
18			Concept on evolution life on the earth