## **Lesson Plan**

Name of the Faculty : Er. Ritika Gera Discipline : Biotechnology : 8<sup>th</sup> sem

Semester

: BIOSAFETY, IPR AND BIOETHICS (BT-404N) **Subject** 

: 15 Weeks (From Feb,2021 to Jun, 2021) **Lesson Plan Duration** 

<sup>\*</sup>Work Load (Lecture/Practical) per week (in hours): Lecture- 03, Tut-00; Practical- 00

Week	Theory		
	Lecture	Topic (including assignment /test)	
	Day		
1 <sup>st</sup>	1 <sup>st</sup>	Biosafety and risk assessment issues	
	2 <sup>nd</sup>	-do-	
	3 <sup>rd</sup>	Regulatory framework; National biosafety policies and law	
2 <sup>nd</sup>	4 <sup>th</sup>	-do-	
	5 <sup>th</sup>	The Cartagena protocol on biosafety.	
	6 <sup>th</sup>	-do-	
3 <sup>rd</sup>	$7^{\text{th}}$	WTO and other international agreements related to biosafety	
	8 <sup>th</sup>	-do-	
	9 <sup>th</sup>	Cross border movement of germplasm;	
4 <sup>th</sup>	10 <sup>th</sup>	Risk management issues – containment	
	11 <sup>th</sup>	-do-	
	12 <sup>th</sup>	Revision	
5 <sup>th</sup>	13 <sup>th</sup>	General principles for the laboratory and environmental biosafety	
	14 <sup>th</sup>	Health aspects; toxicology, allergenicity, antibiotic resistance, etc;	
	15 <sup>th</sup>	-do-	
6 <sup>th</sup>	16 <sup>th</sup>	Impact on environment: gene flow in natural and artificial ecologies	
	17 <sup>th</sup>	-do-	
	18 <sup>th</sup>	Sources of gene escape, tolerance of target organisms,	
$7^{\text{th}}$	19 <sup>th</sup>	Revision	
	20 <sup>th</sup>	Creation of superweeds/ super viruses, etc.	
	21 <sup>st</sup>	-do-	
8 <sup>th</sup>	22 <sup>nd</sup>	Ecological aspects of GMOs and impact on biodiversity.	
	23 <sup>rd</sup>	-do-	
	24 <sup>th</sup>	Monitoring strategies and methods for detecting transgenics	
9 <sup>th</sup>	25 <sup>th</sup>	Revision	
	26 <sup>th</sup>	Radiation safety and non-radio isotopic procedure	
	27 <sup>th</sup>	-do-	
10 <sup>th</sup>	28 <sup>th</sup>	Benefits of transgenics to human health, society and the environment.	
	29 <sup>th</sup>	-do-	
	30 <sup>th</sup>	Risk associated with GMO	
11 <sup>th</sup>	31 <sup>st</sup>	The WTO and other international agreements	
	32 <sup>nd</sup>	-do-	
	33 <sup>rd</sup>	Intellectual properties, copyrights, trademarks	
12 <sup>th</sup>	34 <sup>th</sup>	Trade secrets, patents, geographical indications, etc	

	35 <sup>th</sup>	Revision
	36 <sup>th</sup>	Protection of plant variety and farmers right act
13 <sup>th</sup>	37 <sup>th</sup>	-do-
	38 <sup>th</sup>	Indian patent act and amendments
	39 <sup>th</sup>	-do-
14 <sup>th</sup>	40 <sup>th</sup>	Patent filing
	41 <sup>st</sup>	Convention on biological diversity
	42 <sup>nd</sup>	Implications of intellectual property rights on the commercialization biotechnology products.
	43 <sup>rd</sup>	Revision
	44 <sup>th</sup>	Revision
	45 <sup>th</sup>	Revision