## Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

## Structured Work Plan for Teaching

(Dec-2021 to Apr 2022)

## Details of Classes to be taught

Sr. No.	Class	Name of Assit. Prof.	Subject	Paper
1	M.ScII	Mekle R.K	Botany	B.O .4.4: Plant Pathology-III

Summary of Lesson Plan

Name of Teacher: R.K.Mekle

Class: M.Sc.-II (IV Semester)

Subject	Unit and Chapter to be covered	Date	No. of	Academic	No. of Test /
			Lectures		Assignment with
Credit I: Effect of environment on pathogenesis:(15L)	1. Effect of environment, temperature, moisture, humidity, shade, wind, light, pH, O2 and CO2 concentration.  2. Role of Toxins in Plant pathogenesis: Pathotoxins, Vivo toxins and Phyto toxins.  3. Effect of toxins on plant tissues: Selective and non-selective toxins.  4. Seed Pathology: Scope and importance; seed health testing; methods and procedures; detection of seed borne-fungi, Bacteria and viruses. Seed bio deterioration: Biochemical changes, Morphological abnormalities, loss in germinability. Mycotoxins, Fusarium toxinandaflatoxin. Control of Postharvest, spoilage of grains.	17-12-21 To 11-01-22	04 01 03 07	Field Visit	Project Work
	Credit I: Effect of environment on	1. Effect of environment, temperature, moisture, humidity, shade, wind, light, pH, O2 and CO2 concentration. 2. Role of Toxins in Plant pathogenesis: Pathotoxins, Vivo toxins and Phyto toxins. 3. Effect of toxins on plant tissues: Selective and non-selective toxins. 4. Seed Pathology: Scope and importance; seed health testing; methods and procedures; detection of seed borne-fungi, Bacteria and viruses. Seed bio deterioration: Biochemical changes, Morphological abnormalities, loss in germinability. Mycotoxins, Fusarium toxinandaflatoxin. Control of Post-	1. Effect of environment, temperature, moisture, humidity, shade, wind, light, pH, O2 and CO2 concentration.  2. Role of Toxins in Plant pathogenesis: Pathotoxins, Vivo toxins and Phyto toxins.  3. Effect of toxins on plant tissues: Selective and non-selective toxins.  4. Seed Pathology: Scope and importance; seed health testing; methods and procedures; detection of seed borne-fungi, Bacteria and viruses. Seed bio deterioration: Biochemical changes, Morphological abnormalities, loss in germinability. Mycotoxins, Fusarium toxinandaflatoxin. Control of Post-	Credit I: Effect of environment, temperature, moisture, humidity, shade, wind, light, pH, O2 and CO2 concentration.  2. Role of Toxins in Plant pathogenesis: Pathotoxins, Vivo toxins and Phyto toxins.  3. Effect of toxins on plant tissues: Selective and non-selective toxins.  4. Seed Pathology: Scope and importance; seed health testing; methods and procedures; detection of seed borne-fungi, Bacteria and viruses. Seed bio deterioration:  Biochemical changes, Morphological abnormalities, loss in germinability. Mycotoxins, Fusarium toxinandaflatoxin. Control of Post-	Credit I: Effect of environment, temperature, moisture, humidity, shade, wind, light, pH, O2 and CO2 concentration.  2. Role of Toxins in Plant pathogenesis: Pathotoxins, Vivo toxins and Phyto toxins.  3. Effect of toxins on plant tissues: Selective and non-selective toxins.  4. Seed Pathology: Scope and importance; seed health testing; methods and procedures; detection of seed borne-fungi, Bacteria and viruses. Seed bio deterioration:  Biochemical changes, Morphological abnormalities, loss in germinability. Mycotoxins, Fusarium toxinandaflatoxin. Control of Post-

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	Symptomology, causal organism and		03		
	control measures of:				
Credit- II: Diseases of	1) Sorghum: Long Smut.	12-01-22	02		
	2) Chilly: Die back.	To	03	Guest Lecture	Unit Test-I
crop plants-I:(15L)	3) Soyabean: Charcoal rot.	07-02-22	03	Guest Lecture	Onit lest-i
	4) Potato: Stem canker.	07-02-22	03		
	5) Tomato: Fusarium Wilt		01		
	6) Wheat: Loose Smut		01		
	7) Sugarcane: Red Rot			1	
	8) Papaya: Leaf Curl				
	9) Potato: Black Heart.		01		
	10)Potato/Flax: Dodder or Cuscuta.		01		
	Symptomology,causal organism and		05		
	control measures of:	08-02-22			
Credit III:Diseases of	1) Crucifers: Black spot.	То	05	Student	Unit Test-II
crop plants II:(15L)	2) Sorghum: Loose smut.	08-03-22		Seminar	
	3) Bean: Rust				
	4)Wheat: Brown Rust.		03		
	5) Cucurbits:Powdery mildew.	1			
	6)Grapes: Downy mildew.	1		1	
	7) Potato: Late Blight	1	02		
	8) Wheat: Ear cockles.		02		
	9) Sugarcane: Mosaic				
·	10) Sandal: Spike.	1			
-	1. Genetic Variability in plant		-	-	-
	pathogen:				
Credit IV: Genetic	i) Genetic Variability in viruses	09-03-22	•		
Variability: (15L)	ii) Genetic Variability in Fungi	To	05 `	Group	Project Submission
variability.(13L)	iii) Level of variability in pathogen	08-04-22		Discussion	
<u> </u>	iv) Loss of virulence				
	2. Genetics and molecular basis of				
	host parasite interaction:				
·	i) Evolution of parasitism.				·
	ii) Genetics of host parasite				
	interaction.		04		

iii) Cana fan aana relationahin			
iii) Gene for gene relationship.			
iv) Criteria for gene for gene	04		
relationship.			
v) Molecular basis of host parasitic			
interaction.			
3. Physiologic specialization: General	02		
accounts	02	7)	

Mekle

Head Bead

Department of Botany

Department of Botany

UG, PG and Research Centre

UG, PG and Research (Autonomous).

Rajarshi Shahu Mahavidyalaya (Autonomous).

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