

# Rajarshi Shahu Mahavidyalaya, Latur

## (Autonomous) Structured Work Plan for Teaching (2021-22)

Details of Classes to be taught

Sr. No.	Class	Name of Assit. Prof.	Subject	Paper
1	M.Sc.I	D.S.Chavan	Botany	Paper VII :Plant Physiology & Metabolism

Summary of Lesson Plan

Name of Teacher D.S.Chavan

Class: M.Sc.I (II semester)

Sr. No.	Subject	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<b>Credit: I Transport and translocation mechanism: (15L)</b>	<b>1. Solute transport and photoassimilates translocation</b> Uptake, transport and translocation of water, ions, solutes and macromolecules from soil, through cells, across membranes, through xylem and phloem, nutrient uptake through root microbe interaction; membrane transport proteins.  <b>2. Nitrogen metabolism:.,</b> 1. Root nodulation and nitrogen fixation.	02-02-22 To 18-02-22	07          08		Assignment-I

		2. Nitrogen uptake 3. NOD factor				
	<b>Credit: II Stress physiology and Senescence (15L)</b>	1 <b>Stress physiology:</b> – Responses of plants to biotic (pathogen and insects) and abiotic (water, temperature and salt) stresses.  2. <b>Senescence: Mechanism</b> , physiology of senescence; role of hormones, biochemical aspects, significance in fruit ripening.	21-02-22 To 10-03-22	07  08	Students Seminars	
	<b>Credit: III Photosynthesis (15L)</b>	<b>Photosynthesis:</b> Evolution of photosynthetic apparatus, photooxidation of water, Hills reaction, two-pigment system, mechanism of electron and proton H <sup>+</sup> transport. <b>Carbon assimilation pathways</b> in C <sub>3</sub> , C <sub>4</sub> and CAM plants. Photosynthetic productivity in these plants, and significance.  <b>Photorespiration:</b> Glycolate pathway, Glyoxylate pathway, biochemical basis of photorespiration, significance.	11-03-22 To 29-03-22	05  05  05	Class Quiz	Assignment-II

	Credit: IV Plant Metabolism (15L)	<b>Secondary metabolites -</b> Biosynthesis of terpenes, phenols and nitrogenous compounds and their roles. <b>Phytohormones:</b> Biosynthesis and mechanism of action of Phytohormones auxin, gibberellin, cytokinin, ethylene and ABA. Brassinosteroids, Jasmonic acids, Polyamines, salicylic acid	30-03-22 To 13-04-22	08          07		
--	--------------------------------------	---	----------------------------	--	--	--

  
Teacher

Head

  
Principal  
**PRINCIPAL**  
Rajarshi Shahu Mahavidyalaya  
(Autonomous), Latur