

Rajarshi Shahu Mahavidyalaya, Latur

(Autonomous)

Structured Work Plan for Teaching (Jun – 2018 to Oct. 2018)

Details of Classes to be taught

Sr. No.	Class	Name of Professor	Subject	Paper
1	B.Sc.III	Prof. S. N. Shinde	Botany	Plant Pathology I
2	M.Sc.II			Angiosperms Systematics

Summary of Lesson Plan:

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	Unit-I: Fundamentals of Plant Pathology (10 L)	1. Scope, importance, history and advancement of plant pathology. 2. Classification of plant diseases on the basis of causal organism and symptoms. 3. Field and laboratory diagnosis- Isolation of plant pathogens from infected plant parts, soil and air. 4. Pure culture technique, Koch's postulates for pathogenicity.	04/07/18 To 19/08/18	02 02 02 02 02		
2	UNIT-II: Plant Diseases-I (12 L)	Symptoms, causal organisms, disease cycle and control measures of : 1. Green ear of Bajra. 2. leaf spot of tomato. 3. Rust of Soybean. 4. Red rot of Sugarcane. 5. Angular leaf spot of cotton. 6. Yellow vein mosaic of Bhendi	10/08/18 To 27/09/18	03 02 02 03 01 01		
3	UNIT-III: Plant Diseases-II (13 L)	Symptoms, causal organisms, disease cycle and control measures of: 1. Ergot of Bajara, 2. Whip smut of Sugarcane, 3. Oil spot disease of pomegranate, 4. Leaf spot of Turmeric (<i>Colletotrichum capsici</i>) 5. Citrus canker,	28/09/18 To 31/10/18	03 03 03 03 01 01 01		

		6. Bunchy top of banana 7. Little leaf of Brinjal				
4	UNIT-IV: Plant Disease Development (10 L)	1. Definition of disease, disease pyramid 2. Disease development- Mode of entry of pathogens (through stomata, wounds, root hairs and buds), 3. Factors affecting disease development- Temperature, moisture, wind and soil pH, 4. Dispersal of plant pathogens (by air, water, insects and animal.	28/09/18 To 31/10/18	02 03 03 03 03		

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M. Sc.II

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		<p>Theophrastus, Linnaeus.</p> <p>3. Natural system of classification - Bentham and Hooker.</p> <p>4. Phylogenetic systems of classification – Takhtajan.</p> <p>5. APGsystem of classification, contributors, A .P.web.</p> <p>6. Plant Speciation: Allopathic / Abrupt / Sympatric / Hybrid / Apomictic speciation, Isolating mechanisms.</p>		05		
3	<p>Credit- III:</p> <p>Study of Families-I- Dicotyledons (Polypetalae & Gamopetalae) : (15L)</p>	<p>(Systematic position, general characters, distinguishing features, floral formula, floral diagram and economic importance).</p> <p>A) Polypetalae:</p> <p>1. Ranales – Magnoliaceae,</p> <p>2. Parietales – Papaveraceae.</p> <p>3. Malvales- Tiliaceae.</p> <p>4. Geraniales-, Rutaceae.</p> <p>B) Gamopetalae:</p> <p>1. Rubiales – Rubiaceae,.</p> <p>2. Asterales – Asteraceae.</p> <p>3. Personales- ,Bignoniaceae.</p> <p>4. Lamiales –Verbenaceae</p>	<p>31/08/18 To 20/09/18</p>	<p>02</p> <p>02</p> <p>02</p> <p>02</p> <p>02</p> <p>02</p>		
4	<p>Credit - IV:</p> <p>Study of Families-II: Dicotyledons (Apetalae) & Monocotyledons: (15L)</p>	<p>(Systematic position, general characters, distinguishing features, floral formula, floral diagram and economic importance).</p> <p>A) Apetalae:</p> <p>1. Curvembryae – Amarantaceae.</p> <p>2. Micrombryae – Piperaceae.</p> <p>3. Unisexuales –Casuarinaceae.</p> <p>B) Monocotyledonae:</p> <p>1. Microspermae- Orchidaceae.</p> <p>2. Epigynae – Scitamineae.</p> <p>3. Coronarieae –Commelinaceae.</p> <p>4. Nudiflorae – Typhaceae.</p> <p>5. Cyperales - Cyperaceae .</p>	<p>23/09/18 To 31/10/18</p>	<p>02</p> <p>02</p> <p>02</p> <p>02</p> <p>02</p> <p>05</p>		

Head

Rajarshi Shahu Mahavidyalaya, Latur

(Autonomous)

Structured Work Plan for Teaching

(Dec – 2018 to March. 2019)

Details of Classes to be taught

Sr. No.	Class	Name of Professor	Subject	Paper
1	B.Sc.III	Prof. S. N. Shinde	Botany	Plant Pathology II
2	M.Sc.II			Plant Pathology II

Summary of Lesson Plan:

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	Credit I: Introduction to Plant Pathology (15L)	<p>1. History: Beginning of modern plant pathology; Contribution of Anton de Bary; Benedict Prevost; J.C. Kuhn; Paul Neergaard, P.H. Geregory. History of the development of plant pathology in India; plant disease clinics.</p> <p>2. Disease inciting agents: i) Biotic agents: Bacteria, viruses, fungi, Mycoplasma, nematodes. ii) Abiotic agents: Air pollution; mineral elements, temperature, toxic effects of improperly used chemicals.</p> <p>3. Symptoms of plant diseases: Symptoms caused by Fungi, Bacteria, Viruses, Mycoplasma and Nematodes.</p> <p>4. Dissemination of plant pathogen: Dissemination by Air, Water, Buds, Insects, Man and transmission of plant viruses.</p> <p>5. Economic importance of plant</p>	01/12/18 To 02/01/19	02 02 02 03 02 03 01		

4	Credit IV: Diseases of crop plants II (15L)	Symptomology, causal organism, etiology and control measures of:- 1) Leaf curl of Chilly. 2) Anthracnose of Mango. 3) Wilt of Sugarcane. 4) Black rot of Crucifers. 5) Fruit rot of Cucurbits. 6) Gummosis of sugarcane. 7) Giant mistletoes 8) Rust of Pea. 9) Whip Smut of Sugarcane. 10) White Rust of Mustard.	08/03/19 To 30/03/19	02 02 02 02 02 02 02 02 02		
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B.Sc.III

Sr. No.	Subject	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignm ent with topic and date
1	Unit-I: Aerobiology And Seed Pathology (10 L)	1. Aerobiology- Definition, scope and importance 2. Disease forecasting. 3. Seed pathology-Definition, i. Seed borne pathogens (external and internal). ii. Detection of seed borne pathogens by blotter paper and agar plate methods. iii. Seed treatment (hot water, solar, chemical,) iv. Seed certification	01/07/1 To 27/07/19	03 02 05		
2	Unit-Ii: Plant Diseases-I (12 L)	Symptoms, causal organisms, disease cycle and control measures of 1.Tikka disease ofgroundnut, 2.White rust of Mustard, 3.Loose smut of Wheat, 4.Rust of Jowar, 5.Grain smut of Jowar, 6 .Leaf curl of tomato	01/07/19 To 27/07/19	02 02 02 02 02 02		
3	Unit-Iii: Plant Diseases-Ii (13l)	Symptoms, causal organisms, disease cycle and control measures of 1.Downy mildew of Grape 2.Stem rust of Wheat 3.Wilt of Tur 4. Late blight of Potato 5.Powdery mildew of pea 6.Papaya mosaic 7.Root Knot of vegetables	01/07/19 To 27/07/19	02 02 02 02 02 02 01		
4	Unit –Iv: Defence Mechanism And Plant	1. Structural defense (pre existing and post infectional) 2. Biochemical defense- pre existing and postinfectional	01/07/19 To 27/07/19	02 02		

	Disease Management (10 L)	(phytoalexins) 3. Exclusion and eradication, 4. Chemical control-General account of Sulphur, Copper, systemic fungicides and antibiotics, 5. Integrated pest management 6. Biological control		02 02 01 01		
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