Teaching Plan (Semester-V)

(June 2023 to October 2023)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Professor	Subject	Paper	Total Lecturers:
1	B.Sc. III Sem. V	Mr. S. S. Undalkar	Physics	U-PHY-552 Solid State Physics- X	45 Hrs

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Crystal Structure	12	30/06/23 to 28/07/23	IIT-JAM Questions Solving, Group Discussion	
2	Unit II: Free Electron Theory of Metals	10	03/08/23 to 24/08/23	IIT-JAM Questions Solving	
3	Unit III: Band Theory of Metals	12	25/08/23 to 21/09/23		Unit Test-I Activity Based Test
4	Unit IV: Application of Band Theory	11	22/09/23 to 11/10/23		Unit Test-II

Mr. S. S. Undalkar

Department of Physics & Electronics Rajarshi Shahu Mahavidyalaya,Latur (Autonomous)

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Rajarshi Shahu Mahavidyalaya (Autonomous), Latur Teaching Plan (Semester-I)

(August 2023 to November 2023)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Prof.	Subject	Paper	Total Lecturers:
1	MSc. I Sem. I	Mr S. S. Undalkar	Physics	P-CSM-120 Classical Mechanics	60 Hrs

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Variational Principle and Hamiltonian Formulation	15	01.08.2023 to 16.08.2023		
2	Unit II: Central Force Problem	15	17.08.2023 to 05.09.2023		
3	Unit III: Canonical Transformations and Hamilton - Jacobi Theory	15	06.09.2023 to 20.10.2023		Unit Test-I Activity Based Test
4	Unit IV: Small oscillations & Special theory of Relativity	15	25.10.2023 to 04.11.2023		Unit Test I

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Rajarshi Shahu Mahavidyalaya,Latur (Autonomous)

Teaching Plan (Semester-III)

(June 2023 to October 2023)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Professor	Subject	Paper	Total Lecturers
1	MSc. II	Mr. S. S.	Physics	P-LET-323	60 Hrs
	Sem. III	Undalkar	(Photonics)	Laser Technology	

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Basics of Laser	15	26/06/23 18/07/23	Live Streaming of Satellite Launching	
2	Unit II: Properties of Laser and Optical Resonator	15	19/07/23 22/08/23	Showing YOU- TUBE Videos of LASERs	
3	Unit III: Laser Cavity Modes	15	23/08/23 20/09/23		Unit Test-I Activity based Test
4	Unit IV: Types of Laser	15	25/09/23 14/10/23	Demonstration of CO ₂ Laser	Unit Test II (date will be communicated later)

Mr. S. S. Undalkar

Department of Physics & Electronicsjarshi Shahu Mahavidyalaya,Latur

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Rajarshi Shahu Mahavidyalaya,Latur (Autonomous)

Teaching Plan (Semester-IV)

(Dec 2023 to March 2024)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Prof.	Subject	Paper	Total Lecturers:
1	M. Sc. II	Mr. S. S.	Physics	P-PDS-421	60
	Sem IV	Undalkar		Photonic Devices and Sensors -III	(4-credits)

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Light Beam as Sensing Tool	15	06/12/23 to 01/01/24		
2	Unit II: Optical Fiber Sensor	15	02/01/24 to 31/01/24		Unit Test I
3	Unit III: Liquid Crystal Display	15	05/02/24 to 27/02/24	ICT Based Teaching (PPT)	
4	Unit IV: Plasma Display Panels	15	28/02/24 to 28/03/24		Unit Test II

Date:11.12.2023

Department of Physics & Electronics Rajarshi Shahu Mahavidyalaya, Latur Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

Teaching Plan (Semester-IV)

(Dec 2023 to March 2024)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Prof.	Subject	Paper	Total Lecturers:
1	B.Sc. II	Mr. S. S. Undalkar	Physics	U-PHY-436 Waves, Oscillations and Acoustics-VIII	45 (2-credits)

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Free, Forced and Resonant Vibrations	09	07/12/23 to 23/12/23		
2	Unit II: Wave Motion	14	28/12/23 to 02/02/24	Class Test	Unit Test I
3	Unit III: Stationary Waves	10	03/02/24 to 29/02/24	RAMAN Test	
4	Unit IV: Acoustics And Ultrasonics	12	01/03/24 to 28/03/24		Unit Test II

Mr. S. S. Undalkar

Date:11.12.2023

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Teaching Plan (Semester-V)

(Dec 2023 to March 2024)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Professor	Subject	Paper	Total Lecturers:
1	B.Sc. III Sem. V	Mr. S. S. Undalkar	Physics	Renewable Energy Harvesting Skill-III (SEC)	30 (2-Credits)

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Energy	10	07/12/23 to 04/01/24		
2	Unit II: Solar Energy	10	11/01/24 to 08/02/24	Class Test	
3.	Unit III: Energy Storage	10	15/02/24 to 14/03/24		

Date:11.12.2023

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Rajarshi Shahu Mahavidyalaya (Autonomous), Latur Teaching Plan (Semester-II)

(Dec 2023 to March 2024)

1. Details of Classes to be taught

Sr. No.	Class	Name of Assist. Prof.	Subject	Paper	Total Lecturers:
1	MSc. I	Mr. S. S.	Physics		45
	Sem. II	Undalkar		Condensed Matter Physics	(3-credits)

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Crystal Physics	11	14/12/23 to 05/01/24		
2	Unit II: Crystal Defects	11	06/01/24 to 08/02/24	ICT Based Teaching (PPT)	Unit Test I
3	Unit III: Semiconducting and Superconducting Properties	12	09/02/24 to 07/03/24	RAMAN Test	
4	Unit IV: Magnetic Properties	11	08/03/24 to 29/03/24		Unit Test II

Date:11.12.2023

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