

# Shri R. L. T. College of Science, Akola.

## Department of Physics

**Name of the Teacher: Mr. P. P. Gedam**

**Link/Class Code of Virtual/Google Class-Room**

CLASS	SESSION	CLASS CODE
B.Sc.-II (Physics)	2020-21	Hqw7ylk
B.Sc.-II (Physics)	2021-22	5bipwiu
M.Sc.-I (Physics)	2021-22	77oy3qd

### **E-Content:**

**B.Sc.-II (Sem-III & Sem-IV) Video Lectures and Notes:**

- 1) [Introduction of Syllabus](#) Shri. Prashant Gedam
- 2) [Properties of dot and cross product](#) – 12 Shri. Prashant Gedam
- 3) [L-3: Gradient of scalar Function](#) – Shri. Prashant Gedam
- 4) [Gradient – normal & directional derivatives-04](#) Shri. Prashant Gedam
- 5) [Divergence of vector function-5](#) – Shri. Prashant Gedam
- 6) [Curl of vector function-06](#) Shri. Prashant Gedam
- 7) [Curl of vector function – L7 Class : B.Sc. II Sem III](#) Shri. Prashant Gedam
- 8) [B.Sc. II Vedio lecture on line integral-08](#) Shri. Prashant Gedam
- 9) [B.Sc. II Vedio lecture on line integral -09](#) Shri. Prashant Gedam
- 10) [B.Sc. II Vedio lecture on Surface integral – 10](#) Shri Prashant Gedam

- 11) [B.Sc. II Video lecture on Volume integral – 11](#) Shri. Prashant Gedam
- 12) [B.Sc. II Video lecture on Electric flux – 12](#) Shri. Prashant Gedam
- 13) [B.Sc. II Video lecture on Gauss Divergence Theorem -13](#) Shri. Prashant Gedam
- 14) [B.Sc. II Numericals on Gauss Divergence Theorems](#) Shri. Prashant Gedam
- 15) [B.Sc. II topic : work done on charge particle in electric field.](#) Shri. Prashant Gedam
- 16) [B.Sc. II topic : force on moving charge](#) Shri. Prashant Gedam
- 17) [CamScanner 10-13-2020 11.26.00](#) Shri. Prashant Gedam
- 18) [B.Sc. II Lorentz force](#) Shri. Prashant Gedam
- 19) [B.Sc II lecture on Amperes force law](#) Shri. Prashant Gedam
- 20) [B.Sc. II \(Physics\) Ampere's law](#) Shri. Prashant Gedam
- 21) [B.Sc. II \(Physics\) Ampere's law & magnetic field due to straight conductor](#) Shri. Prashant Gedam
- 22) [B.Sc. II \(Physics\) Home Assignment](#) Shri. Prashant Gedam
- 23) [B.Sc. II \(Physics\) magnetic field inside the current carrying conductor](#) Shri. Prashant Gedam
- 24) [B.Sc. II \(Physics\) magnetic field due to solenoid](#) Shri. Prashant Gedam
- 25) [B.Sc. II Video lecture on Magnetic field due to Toroid.](#) Shri. Prashant Gedam
- 26) [B.Sc. II Physics Assignment](#) Shri P. P. Gedam

## **Name of the Teacher: Dr. R. M. Agrawal**

### **Link/Class Code of Virtual/Google Class-Room**

<b>CLASS</b>	<b>SESSION</b>	<b>CLASS CODE</b>
B.Sc.-II (Physics)	2020-21	<b>lwzk2ue</b>
B.Sc.-II (Physics)	2021-22	<b>65ocrb3</b>

### **E-Content:**

#### **B.Sc.-II (Sem-III & Sem-IV) Video Lectures and Notes:**

- 1) [Nuclear Physics G M Counter](#) Dr. R M Agrawal
- 2) [Nuclear Physics \( Properties of Nucleus and Nuclear forces\)](#) Dr. R M Agrawal
- 3) [Nuclear Physics \( Beta Decay\)](#) Dr. R M Agrawal  
[Nuclear Physics \(Unit IV\) G M Counter](#) Dr. R M Agrawal  
[Topic : Nuclear Physics \(Unit IV\) Beta Decay](#) Dr. R M Agrawal
- 4) [Topic : Introduction of Syllabus and its Review of B. Sc. I year Physics](#) Dr. R M Agrawal  
[Topic : Nuclear Physics \(Alpha Decay\)](#) Dr. R M Agrawal
- 5) [Topic: Kepler's laws of planetary motion](#) Dr. R M Agrawal  
[Topic: Nuclear Physics \( Alpha Decay\)](#) Dr. R M Agrawal  
[Notes on Kepler's laws of planetary motion](#) Dr. R M Agrawal
- 6) [Topic : Newton's laws of gravitation](#) Dr. R M Agrawal
- 7) [Topic : Notes on Newton's laws of gravitation](#) Dr. R M Agrawal
- 8) [Topic : Gravitational field, Gauss Theorem](#) Dr. R M Agrawal
- 9) [Topic : Nuclear Physics \(Nuclear Reaction and Nuclear Reactor\)](#) Dr. R M Agrawal
- 10) [Topic : Notes on Gravitational field and Gauss Theorem](#) Dr R M Agrawal
- 11) [Notes on Nuclear Physics \(Nuclear Reaction and Nuclear Reactor\)](#) Dr. R M Agrawal
- 12) [Topic : Rotational Motion](#) Dr. R M Agrawal

## **Name of the Teacher: Mr. S. R. Jaiswal**

### **Link/Class Code of Virtual/Google Class-Room**

<b>CLASS</b>	<b>SESSION</b>	<b>CLASS CODE</b>
B.Sc.-III (Physics)	2019-20	<b>bpeuaw4</b>
B.Sc.-III (Physics)	2020-21	<b>lwzk2ue</b>
B.Sc.-III (Physics)	2021-22	<b>pgcux3o</b>
Diploma in Astronomy	2020-21	<b>bxb4oo6</b>
Diploma in Astronomy	2021-22	<b>What's App Group</b>

### **E-Content:**

#### **B.Sc.-III (Sem-V & Sem-VI) Video Lectures:**

##### **Semester-V**

#### **Quantum Mechanics**

**Unit-I: Quantum Mechanics (Origin) (Total Lectures = 14)**

[https://youtube.com/playlist?list=PLjXUrfxwYKyQ7Rlsz4h0h5k\\_HQYzgTQrF](https://youtube.com/playlist?list=PLjXUrfxwYKyQ7Rlsz4h0h5k_HQYzgTQrF)

**Unit-II: Quantum Mechanics (Schrodinger Equation and Its Applications) (Total Lectures = 11)**

<https://youtube.com/playlist?list=PLjXUrfxwYKySyEUUX9vCwvbZqmTzUWWyt>

#### **Atomic and Molecular Physics**

**Unit-III: Atomic and Molecular Spectroscopy (Total Lectures = 16)**

<https://youtube.com/playlist?list=PLjXUrfxwYKyQRaiJEgxOf26e298wlS0xR>

##### **Semester-VI**

#### **Solid State Physics**

**Unit-III: Crystallography (Total Lectures = 09)**

<https://youtube.com/playlist?list=PLjXUrfxwYKyQKh25U4gbNKEuy3r1s4jrR>

**Unit-IV: Electrical Properties of Materials (Total Lectures = 09)**

[https://youtube.com/playlist?list=PLjXUrfxwYKyRO\\_hCHRFxHtSnuGuBfGvtk](https://youtube.com/playlist?list=PLjXUrfxwYKyRO_hCHRFxHtSnuGuBfGvtk)

**Unit-V: Magnetic Properties of Materials (Total Lectures = 12)**

[https://youtube.com/playlist?list=PLjXUrfxwYKyTxR0N\\_XOvZOko\\_aDgySCSs](https://youtube.com/playlist?list=PLjXUrfxwYKyTxR0N_XOvZOko_aDgySCSs)

**Unit-VI: Superconductivity (Total Lectures = 05)**

<https://youtube.com/playlist?list=PLjXUrfxwYKyRsgqk7z81lzMhb2JijiUZL>

**B.Sc.-I (Sem-I)**

### **Classical Mechanics**

**Unit-III: Simple Harmonic Motion (Total Lectures = 12)**

<https://youtube.com/playlist?list=PLjXUrfxwYKySXtFz2xqhn5bTuyaPNYOcv>

### **General Topics:**

1. Development of E-Contents for Teaching & Learning (Total Lectures = 24)

<https://youtube.com/playlist?list=PLjXUrfxwYKyS-Rs4y2XEFgi7W8rcb45Kk>

2. Basic Electronics (Total Lectures = 04)

<https://youtube.com/playlist?list=PLjXUrfxwYKyQG7OGdvLqbJLi27YFfYV50>

3. Diametional Analysis (Total Lectures = 04)

<https://youtube.com/playlist?list=PLjXUrfxwYKySjTuSvNxzMIYLHOJEGeNnZ>

4. Introduction to UGC/CSIR-NET JRF/GATE exam for enter in Ph. D Program.

<https://youtu.be/0B7QwNGcxAE>

5. Practical Demonstration of Concept of Parallel Plate Capacitor

<https://youtu.be/qTzfM56Fe7E>

6. Formation of Marathi/Hindu Calendar from Phases of the moon (Month: Chaitra, Vaisakha, .....)

<https://youtu.be/ugLmQVKWJc4>

### **Diploma in Astronomy: (Notes and PPTs)**

**Link of Google Drive for all data:**

[https://drive.google.com/drive/folders/1buWG3eq4Zy8I\\_sGs4Be0XncYNjAl7oyD?usp=sharing](https://drive.google.com/drive/folders/1buWG3eq4Zy8I_sGs4Be0XncYNjAl7oyD?usp=sharing)