

# Shri Shivaji Science College, Amravati

## E – Contents for Under Graduate Students

Department of Physics

### M. Sc. Part – I (Semester – I)

| Notes and PowerPoints   |   |                   | Links to Video Lectures |      |         |
|---|---|-------------------|-------------------------|------|---------|
| Topic   | Link  | Teacher           | Topic                   | Link | Teacher |
| Unit 1 Basic Quantum Mechanics  | <a href="https://drive.google.com/file/d/1j189vUKRd5s8E6T8Gm-S5QrBqo7VfJdl/view?usp=sharing">https://drive.google.com/file/d/1j189vUKRd5s8E6T8Gm-S5QrBqo7VfJdl/view?usp=sharing</a> | Dr. P.A. Nagpure  |                         |      |         |
| Unit 2 Hermitian Operators, Dirac's Notation's, Hilbert Space         | <a href="https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing">https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing</a> |                   |                         |      |         |
| Unit 3 Operator Method, Harmonic Oscillator, Hydrogen Atom            | <a href="https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing">https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing</a> |                   |                         |      |         |
| Unit 4 Angular momentum   | <a href="https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing">https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing</a> |                   |                         |      |         |
| Unit 5 Representation in QM and Approximation Methods                 | <a href="https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing">https://drive.google.com/file/d/1So0RAQ-oF-6yckmAQ0loobdaR7KG-so0/view?usp=sharing</a> |                   |                         |      |         |
| Methods for determination of zeros of linear and nonlinear equations. | <a href="https://classroom.google.com/c/MTcwMjYzNjIwODY5/m/Mjc0NzUzODMxOTE3/details">https://classroom.google.com/c/MTcwMjYzNjIwODY5/m/Mjc0NzUzODMxOTE3/details</a>                 | Miss. S. M. Butte |                         |      |         |

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|---------------------|---|-------------------|--|--|--|
| Classical Mechanics | <a href="https://www.slideshare.net/PankajKhirade1/classical-mechanicsmsc">https://www.slideshare.net/PankajKhirade1/classical-mechanicsmsc</a> | Dr. P. P. Khirade |  |  |  |
|---------------------|---|-------------------|--|--|--|

**M. Sc. Part – I (Semester – II)**

| Notes and PowerPoints       |   |                  | Links to Video Lectures |      |         |
|-----------------------------|---|------------------|-------------------------|------|---------|
| Topic                       | Link  | Teacher          | Topic                   | Link | Teacher |
| 2PHY2: Quantum Mechanics-II | <a href="https://sites.google.com/view/pankajnagpure/lecture-notes/pg?authuser=0">https://sites.google.com/view/pankajnagpure/lecture-notes/pg?authuser=0</a> | Dr. P.A. Nagpure |                         |      |         |
|                             |   |                  |                         |      |         |

**M. Sc. Part – II (Semester – III)**

| Notes and PowerPoints                                       |   |                  | Links to Video Lectures        |   |                       |
|---|---|------------------|--------------------------------|---|-----------------------|
| Topic   | Link  | Teacher          | Topic                          | Link  | Teacher               |
| Structure of Solid And Importance of Miller Indices Part 01 | <a href="https://youtu.be/SCxFase5f3E">https://youtu.be/SCxFase5f3E</a>   | Dr. N.N. Sarkar  |                                |   |                       |
| Structure of Solid And Importance of Miller Indices Part 02 | <a href="https://youtu.be/svzIO1Y9UvY">https://youtu.be/svzIO1Y9UvY</a>   |                  |                                |   |                       |
| X-ray diffraction   | <a href="https://youtu.be/9vIwj_F92F8">https://youtu.be/9vIwj_F92F8</a>   |                  |                                |   |                       |
| Determination of Crystal Structure                          | <a href="https://youtu.be/aK5_GcqUag4">https://youtu.be/aK5_GcqUag4</a>   |                  |                                |   |                       |
| 3 PHY-4(ii) : CONDENSED MATTER PHYSICS-I Unit -1            | <a href="https://drive.google.com/file/d/15uStabM6U2xb72J7PkkTQQgglARjuVHd/view?usp=sharing">https://drive.google.com/file/d/15uStabM6U2xb72J7PkkTQQgglARjuVHd/view?usp=sharing</a> | Dr. A. B. Bodade | 3 PHY-4(ii) : CONDENSED MATTER | <a href="https://youtu.be/uzg4k1FGZfi">https://youtu.be/uzg4k1FGZfi</a> | Dr Radhika G Deshmukh |
| 3 PHY -3 Atomic and molecular Physics                       | <a href="https://drive.google.com/file/d/1JfBWkvHCfyJdPZ0ubO3DEAWeCn8G5Zcs/view?usp=sharing">https://drive.google.com/file/d/1JfBWkvHCfyJdPZ0ubO3DEAWeCn8G5Zcs/view?usp=sharing</a> | Dr. S.K. Sayyad  |                                |   |                       |

|                   |   |                 |  |  |  |
|-------------------|---|-----------------|--|--|--|
| Vector Atom Model | <a href="https://drive.google.com/file/d/1r_DVEQOr_YFOpiZ2cP9MEkJvdcEw_VEN/view?usp=sharing">https://drive.google.com/file/d/1r_DVEQOr_YFOpiZ2cP9MEkJvdcEw_VEN/view?usp=sharing</a> | Dr. S.K. Sayyad |  |  |  |
|-------------------|---|-----------------|--|--|--|

**M. Sc. Part – II (Semester – VI)**

| Notes and PowerPoints |   |                   | Links to Video Lectures |   |                |
|-----------------------|---|-------------------|-------------------------|---|----------------|
| Topic                 | Link  | Teacher           | Topic                   | Link  | Teacher        |
| Sem IV Unit-I         | <a href="https://drive.google.com/file/d/1nbjWCq-LyWBImcAYqYK0E4bdEiJxW7P7/view?usp=sharing">https://drive.google.com/file/d/1nbjWCq-LyWBImcAYqYK0E4bdEiJxW7P7/view?usp=sharing</a>   | Dr. W. S. Barde   |                         |   |                |
| Sem IV Unit-II        | <a href="https://drive.google.com/file/d/17q3A0MmM2LvhyGyzs4VBG7zhvn7EEeMq/view?usp=sharing">https://drive.google.com/file/d/17q3A0MmM2LvhyGyzs4VBG7zhvn7EEeMq/view?usp=sharing</a>   |                   |                         |   |                |
| Sem IV Unit-III       | <a href="https://drive.google.com/file/d/1YIFhdpKYVmUu_8VrKgLSiHIFi-uEA1iH/view?usp=sharing">https://drive.google.com/file/d/1YIFhdpKYVmUu_8VrKgLSiHIFi-uEA1iH/view?usp=sharing</a>   |                   |                         |   |                |
| Sem IV Unit-IV        | <a href="https://drive.google.com/file/d/1FrYluYyNr1OVRcXqPDyYcFeoPAWzHGMMK/view?usp=sharing">https://drive.google.com/file/d/1FrYluYyNr1OVRcXqPDyYcFeoPAWzHGMMK/view?usp=sharing</a> |                   |                         |   |                |
| Sem IV Unit-V         | <a href="https://drive.google.com/file/d/1hQ9bk9aNI-NflwLiSZfMLwq3cyDujiti/view?usp=sharing">https://drive.google.com/file/d/1hQ9bk9aNI-NflwLiSZfMLwq3cyDujiti/view?usp=sharing</a>   |                   |                         |   |                |
| Operational Amplifier | <a href="https://www.slideshare.net/vaishalideshmukh22/opamp-1-234551722">https://www.slideshare.net/vaishalideshmukh22/opamp-1-234551722</a>   | Dr. V.V. Deshmukh |                         |   |                |
|                       |   |                   | Plasma Physics          | <a href="https://drive.google.com/file/d/13ihHLLgw8pFws2b4dvQh_YmSzJQwQOle/view?usp=drive_sdk">https://drive.google.com/file/d/13ihHLLgw8pFws2b4dvQh_YmSzJQwQOle/view?usp=drive_sdk</a> | Dr. S.S. Arsad |
|                       |   |                   |                         | <a href="https://drive.google.com/file/d/1OZiXXZdIARfSd3SNmdTgMU9obQ8W3sIO/view?usp=drive_sdk">https://drive.google.com/file/d/1OZiXXZdIARfSd3SNmdTgMU9obQ8W3sIO/view?usp=drive_sdk</a> |                |
|                       |   |                   |                         | <a href="https://drive.google.com/file/d/13ihHLLgw8pFws2b4dvQh_YmSzJQwQOle/view?usp=drive_sdk">https://drive.google.com/file/d/13ihHLLgw8pFws2b4dvQh_YmSzJQwQOle/view?usp=drive_sdk</a> |                |

