

Kamla Nagar, Kanpur

Lesson Plan Session 2023 - 2024 Class: IX

Subject : Physics

Book : Science (NCERT) - IX

**Subject Coordinator** 

Name: Er. Hemant Verma

Sign:

**Head of Department** 

Name: Ms. Agnita Naha

Sign:



### Kamla Nagar, Kanpur Yearly Syllabus/Planning overview Session: 2023 - 2024

Subject: Physics Class: 9 No. of periods: 71

| Month     | Assessed in                | Lesson/s to be covered             | Period Count |
|-----------|----------------------------|------------------------------------|--------------|
| April     | No Partial<br>assessment   | Motion (Partly)                    | 9            |
| May       | Test I + Annual<br>Exams   | Motion (Full)                      | 6            |
| May       | No Partial<br>assessment   | Force and Laws of Motion (Partial) | 2            |
| June      | No Partial<br>assessment   | Force and Laws of Motion (Partial) | 2            |
| July      | Test II + Annual<br>Exams  | Force and Laws of Motion (Full)    | 8            |
| July      | No Partial<br>assessment   | Gravitation (Partial)              | 1            |
| August    | No Partial<br>assessment   | Gravitation (Partial)              | 7            |
| September | Test III + Annual<br>Exams | Gravitation (Full)                 | 7            |
| September | No Partial<br>assessment   | Work and Energy (Partial)          | 1            |
| October   | Annual Exams               | Work and Energy (Full)             | 9            |
| November  | No Partial<br>assessment   | Sound (Partial)                    | 8            |
| December  | Annual Exams               | Sound (Full)                       | 3            |
| December  |                            | Practical                          | 3            |
| January   |                            | Revision                           | 5            |

Subject coordinator: Er. Hemant Verma HOD: Ms. Agnita Naha



### Kamla Nagar, Kanpur Monthly lesson plan overview

Session: 2023 - 2024

Subject: Physics: 9
Book: Science (NCERT) - 9
No. of periods: 71

| Date/Week |          | T  |                 | Status                     |
|-----------|----------|--|-----------------|----------------------------|
| From      | То       | Lesson/s to be covered in classroom  | Period<br>Count | (Yes/No)<br>(Reason if No) |
| 03.04.23  | 08.04.23 | Introduction: Motion + Describing Motion 1   |                 |                            |
| 10.04.23  | 15.04.23 | Uniform and Non-Uniform Motion + Speed and<br>Velocity   | 2               |                            |
| 17.04.23  | 22.04.23 | Rate of Change of Velocity   | 3               |                            |
| 24.04.23  | 29.04.23 | Graphical Representation of Motion   | 3               |                            |
| 01.05.23  | 06.05.23 | Graphical Representation of Motion +<br>Equations of Motion                                    | 2               |                            |
| 08.05.23  | 13.05.23 | Equations of Motion  | 2               |                            |
| 15.05.23  | 20.05.23 | Uniform Circular Motion + Back Question<br>Answers + Introduction: Force and laws of<br>Motion | 3               |                            |
| 22.05.23  | 27.05.23 | Balanced and Unbalanced Forces   | 1               |                            |
| 29.05.23  | 03.06.23 | Contact and Non-Contact Forces + Summer<br>Break   | 1               |                            |
| 05.06.23  | 10.06.23 | Summer Break   | 0               |                            |
| 12.06.23  | 17.06.23 | Summer Break   | 0               |                            |
| 19.06.23  | 24.06.23 | Summer Break   | 0               |                            |
| 26.06.23  | 01.07.23 | 1 <sup>st</sup> Law of Motion + 2 <sup>nd</sup> Law of Motion                                  | 3               |                            |
| 03.07.23  | 08.07.23 | 2 <sup>nd</sup> Law of Motion + 3 <sup>rd</sup> Law of Motion                                  | 3               |                            |
| 10.07.23  | 15.07.23 | Conservation of Momentum + Numerical   | 2               |                            |
| 17.07.23  | 22.07.23 | Revision of Test I + Test I  | 2               |                            |
|           |          |  | <u></u>         |                            |

| 24.07.23 | 29.07.23 | Test I + Back Exercises + Intext Questions   | 2 |  |
|----------|----------|--|---|--|
| 31.07.23 | 05.08.23 | Introduction: Gravitation + Free Fall  | 3 |  |
| 07.08.23 | 12.08.23 | Mass + Weight + Thrust   | 3 |  |
| 14.08.23 | 19.08.23 | Pressure + Buoyancy  | 2 |  |
| 21.08.23 | 26.08.23 | Revision of Test II + Test II  | 1 |  |
| 28.08.23 | 02.09.23 | Test II  | 0 |  |
| 04.09.23 | 09.09.23 | Floatation + Density + Archimedes' Principle   | 3 |  |
| 11.09.23 | 16.09.23 | Relative Density + Numerical   | 3 |  |
| 18.09.23 | 23.09.23 | Back Exercises + Intext Questions +<br>Introduction: Work  | 2 |  |
| 25.09.23 | 30.09.23 | Revision of Test III + Test III  | 1 |  |
| 02.10.23 | 07.10.23 | Introduction: Energy + Forms of Energy:<br>Kinetic Energy  | 2 |  |
| 09.10.23 | 14.10.23 | Forms of Energy: Potential Energy + Law of<br>Conservation of Energy                                   | 3 |  |
| 16.10.23 | 21.10.23 | Rate of Doing Work + Commercial Unit of<br>Energy + Numericals   | 3 |  |
| 23.10.23 | 28.10.23 | Dussehra Holidays  | 0 |  |
| 30.10.23 | 04.11.23 | Back Question and Answers + Introduction:<br>Sound: Production and Propagation +<br>Longitudinal Waves | 3 |  |
| 06.11.23 | 11.11.23 | Characteristics of Sound Waves   | 1 |  |
| 13.11.23 | 18.11.23 | Speed of Sound in Different Medium +<br>Reflection of Sound + Echo + Reverberation                     | 2 |  |
| 20.11.23 | 25.11.23 | Applications of Multiple Reflection of Sound + Application of Ultrasound + SONAR                       | 3 |  |
| 27.11.23 | 02.12.23 | Annual Function  | 0 |  |
| 04.12.23 | 09.12.23 | Structure of Human Ear + Numericals + Back<br>Question and Answers                                     | 3 |  |
|          |          |  |   |  |

| 11.12.23 | 16.12.23 | Practical               | 3 |  |
|----------|----------|-------------------------|---|--|
| 18.12.23 | 23.12.23 | Revision                | 3 |  |
| 25.12.23 | 30.12.23 | Revision                | 3 |  |
| 01.01.24 | 06.01.24 | Winter Break            | 0 |  |
| 08.01.24 | 13.01.24 | Winter Break + Revision | 1 |  |
| 15.01.24 | 20.01.24 | Revision                | 2 |  |
| 22.01.24 | 27.01.24 | Revision                | 2 |  |
| 29.01.24 | 03.02.24 | Revision                | 2 |  |
| 05.02.24 | 10.02.24 | Revision                | 2 |  |

Subject coordinator: Er. Hemant Verma

HOD: Ms. Agnita Naha



#### Kamla Nagar, Kanpur Weekly planning overview Session: 2023 - 2024

Subject : Physics

Class: 9 No. of periods: 71

| Period                                    | Topic/s to be covered in classroom                              | Homework                     | Status (Yes/No)<br>(Reason if No) |
|---|---|------------------------------|-----------------------------------|
| <b>WEEK 01:</b> 03/4/23 <b>to</b> 08/4/23 |   | Period Count: 01             |                                   |
| PD1                                       | Introduction: Motion + Rest + Motion along a straight line      | In-text questions<br>pg. 100 |                                   |
|   | <b>WEEK 02:</b> 10/4/23 <b>to</b> 15/4/23                       | Period Co                    | unt: 02                           |
| PD1                                       | Uniform and Non-Uniform Motion                                  | Read till discussed          |                                   |
| PD2                                       | Speed and Velocity  | In-text questions pg. 102    |                                   |
|   | <b>WEEK 03:</b> 17/4/23 <b>to</b> 22/4/23                       | Period Co                    | unt: 03                           |
| PD1                                       | Rate of Change of Velocity                                      | Read till discussed          |                                   |
| PD2                                       | Rate of Change of Velocity Contd                                | In-text questions pg. 103    |                                   |
| PD3                                       | Rate of Change of Velocity Contd                                | Read till discussed          |                                   |
|   | <b>WEEK 04:</b> 24/4/23 <b>to</b> 29/4/23                       | Period Co                    | unt: 03                           |
| PD1                                       | Graphical Representation of Motion: Distance-Time<br>Graph      | Read till discussed          |                                   |
| PD2                                       | Graphical Representation of Motion: Displacement-<br>Time Graph | In-text questions pg. 107    |                                   |
| PD3                                       | Graphical Representation of Motion: Velocity-Time<br>Graph      | Read till discussed          |                                   |
|   | <b>WEEK 05:</b> 1/5/23 <b>to</b> 6/5/23                         | Period Cou                   | nt: 02                            |
| PD1                                       | Numerical of Graphical Representation of Motion                 | Read till discussed          |                                   |
| PD2                                       | Equations of Motion   | Read till discussed          |                                   |
|   | <b>WEEK 06:</b> 8/5/23 <b>to</b> 13/5/23                        | Period Cou                   | ınt: 02                           |

| Equations of Motion Contd  | In-text questions pg. 110  |  |
|--|--|--|
| Equations of Motion Contd  | Read till discussed  |  |
| <b>WEEK 07:</b> 15/5/23 <b>to</b> 20/5/23  | Period Cou   | ınt: 03  |
| Uniform Circular Motion  | Read till discussed  |  |
| Back Questions and Answers discussed   | Back Questions<br>and Answers  |  |
| Introduction: Force and laws of Motion   | Read till discussed  |  |
| <b>WEEK 08-09:</b> 22/5/23 <b>to</b> 03/6/23   | Period C   | ount: 02   |
| Balanced and Unbalanced Forces   | Read till discussed  |  |
| Contact and Non-Contact Forces   | Read till discussed  |  |
| <b>WEEK 10 - 12:</b> 05/6/23 <b>to</b> 24/5/23   | Period   | Count: 00  |
| · Break  |  |  |
| <b>WEEK 16:</b> 26/6/23 <b>to</b> 01/7/23  | Period Count: 03   |  |
| First Law of Motion  | Read till discussed  |  |
| First Law of Motion (Numerical) + Intertia and<br>Mass   | In-text questions pg. 118  |  |
| 2 <sup>nd</sup> Law of Motion  | Read till discussed  |  |
| <b>WEEK 17:</b> 3/7/23 to 8/7/23   | Period Count   | :: 03  |
| Mathematical Equation on 2 <sup>nd</sup> Law   | Read till discussed  |  |
| 3 <sup>rd</sup> Law of Motion  | Read till discussed  |  |
|  |  |  |
| Numerical of 2 <sup>nd</sup> and 3 <sup>rd</sup> Equation of Motion                              | Practice   |  |
| Numerical of 2 <sup>nd</sup> and 3 <sup>rd</sup> Equation of Motion  WEEK 18: 10/7/23 to 15/7/23 | Practice Period Co   | unt: 02  |
| _  |  | unt: 02  |
|  | Equations of Motion Contd  WEEK 07: 15/5/23 to 20/5/23  Uniform Circular Motion  Back Questions and Answers discussed  Introduction: Force and laws of Motion  WEEK 08-09: 22/5/23 to 03/6/23  Balanced and Unbalanced Forces  Contact and Non-Contact Forces  WEEK 10 - 12: 05/6/23 to 24/5/23  Break  WEEK 16: 26/6/23 to 01/7/23  First Law of Motion  First Law of Motion (Numerical) + Intertia and Mass  2nd Law of Motion  WEEK 17: 3/7/23 to 8/7/23  Mathematical Equation on 2nd Law  3rd Law of Motion | Equations of Motion Contd  Equations of Motion Contd  Equations of Motion Contd  Read till discussed  WEEK 07: 15/5/23 to 20/5/23  Period Contact and Answers discussed  Back Questions and Answers discussed  Back Questions and Answers  Introduction: Force and laws of Motion  Read till discussed  WEEK 08-09: 22/5/23 to 03/6/23  Period Contact and Non-Contact Forces  Read till discussed  WEEK 10 - 12: 05/6/23 to 24/5/23  Period  Break  WEEK 16: 26/6/23 to 01/7/23  Period  First Law of Motion  Read till discussed  First Law of Motion (Numerical) + Intertia and Mass  2nd Law of Motion  Read till discussed  WEEK 17: 3/7/23 to 8/7/23  Period Count  Mathematical Equation on 2nd Law  Read till discussed  Read till discussed |

|   | <b>WEEK 19:</b> 17/7/23 to 22/7/23  | Period Count:                | 02 |
|---|---|------------------------------|----|
| PD1                                       | Revision of Test I + Test I   | Revise for Test I            |    |
| PD2                                       | Revision of Test I + Test I   | Revise for Test I            |    |
|   | <b>WEEK 20:</b> 24/7/23 <b>to</b> 29/7/23                                   | Period Count:                | 02 |
| PD1                                       | Test I + Back Question and Answers  | Back Question<br>and Answers |    |
| PD2                                       | In-Text Questions   | Practice                     |    |
|   | <b>WEEK 21:</b> 31/7/23 <b>to</b> 5/8/23                                    | Period Count: (              | )3 |
| PD1                                       | Introduction: Gravitation + Universal Law of<br>Gravitation                 | Read till discussed          |    |
| PD2                                       | Importance of Universal Law of Gravitation                                  | In-text questions pg. 134    |    |
| PD3                                       | Free Fall + Calculate the value of 'g'                                      | Read till discussed          |    |
|   | <b>WEEK 22:</b> 7/8/23 <b>to</b> 12/8/23                                    | Period Count: (              | )3 |
| PD1                                       | Motion of Object under the influence of<br>Gravitational Force of the Earth | In-text questions pg. 136    |    |
| PD2                                       | Mass + Weight   | In-text questions pg. 138    |    |
| PD3                                       | Thrust  | Read till discussed          |    |
|   | <b>WEEK 23:</b> 14/8/23 <b>to</b> 19/8/23                                   | Period Count:                | 02 |
| PD1                                       | Pressure  | Read till discussed          |    |
| PD2                                       | Buoyancy  | Numerical                    |    |
|   | <b>WEEK 24:</b> 21/8/23 <b>to</b> 26/8/23                                   | Period Count:                | 01 |
| PD1                                       | Revision of Test II   | Revise                       |    |
| <b>WEEK 25:</b> 28/8/23 <b>to</b> 02/9/23 |   | Period Count:                | 00 |
| Test II                                   |   |                              |    |
|   | <b>WEEK 26:</b> 04/9/23 <b>to</b> 9/9/23                                    | Period Count: 0              | 3  |

| PD1                           | Floatation  | Read till discussed   |          |
|-------------------------------|---|---|----------|
| PD2                           | Density   | In-text questions pg. 141                                   |          |
| PD3                           | Archimedes' Principle   | In-text questions pg. 142                                   |          |
|                               | <b>WEEK 27:</b> 11/9/23 <b>to</b> 16/9/23                     | Period Cou  | unt: 03  |
| PD1                           | Relative Density  | Read till discussed   |          |
| PD2                           | Relative Density Contd  | Read till discussed   |          |
| PD3                           | Numerical   | Numerical   |          |
|                               | <b>WEEK 28:</b> 18/9/23 to 23/9/23                            | Period Cou  | nt: 02   |
| PD1                           | In-text Questions and Back Questions and<br>Answers discussed | Back Question<br>and Answers                                |          |
| PD2                           | Introduction: Work  | In-text questions<br>pg. 148 + In-text<br>questions pg. 149 |          |
|                               | <b>WEEK 29:</b> 25/9/23 <b>to</b> 30/9/23                     | Period Count: 01  |          |
| PD1                           | Revision of Test III  | Revise  |          |
|                               | <b>WEEK 30:</b> 02/10/23 <b>to</b> 7/10/23                    | Period Coun   | t: 02    |
| PD1                           | Introduction: Energy  | Read till discussed   |          |
| PD2                           | Forms of Energy: Kinetic Energy                               | In-text questions pg. 152                                   |          |
|                               | <b>WEEK 31:</b> 9/10/23 <b>to</b> 14/10/23                    | Period Co   | unt: 03  |
| PD1                           | Forms of Energy: Potential Energy                             | Read till discussed   |          |
| PD2                           | Law of Conservation of Energy                                 | Read till discussed   |          |
| PD3                           | Law of Conservation of Energy Contd                           | Practice  |          |
| WEEK 32: 16/10/23 to 21/10/23 |   | Period Co   | ount: 03 |
| PD1                           | Rate of Doing Work  | In-text questions pg. 156                                   |          |
| PD2                           | Commercial Unit of Energy                                     | Read till discussed   |          |
|                               |   |   |          |

| PD3  | Numerical   | Numerical                         |          |  |  |
|--|---|-----------------------------------|----------|--|--|
|  | <b>WEEK 33:</b> 23/10/23 <b>to</b> 28/10/23 <b>Period Count: 00</b> |                                   |          |  |  |
| Dusshera   | a Holidays  |                                   |          |  |  |
| <b>WEEK 34:</b> 30/10/23 <b>to</b> 4/11/23 <b>Period Count: 03</b> |   |                                   |          |  |  |
| PD1  | Back Question and Answers discussed                                 | Back Question<br>and Answers      |          |  |  |
| PD2  | Introduction: Sound: Production and Propagation                     | In-text questions<br>pg. 162      |          |  |  |
| PD3  | Longitudinal Waves  | In-text questions pg. 163         |          |  |  |
|  | <b>WEEK 35:</b> 6/11/23 <b>to</b> 11/11/23                          | Period Co                         | ount: 01 |  |  |
| PD1  | Characteristics of Sound Waves                                      | In-text questions<br>pg. 166 – I  |          |  |  |
|  | <b>WEEK 36:</b> 13/11/23 <b>to</b> 18/11/23                         | Period C                          | ount: 02 |  |  |
| PD1  | Speed of Sound in Different Medium                                  | In-text questions<br>pg. 166 – II |          |  |  |
| PD2  | Reflection of Sound + Echo + Reverberation                          | In-text questions pg. 168         |          |  |  |
|  | <b>WEEK 37:</b> 20/11/23 <b>to</b> 25/11/23                         | Period Count: 03                  |          |  |  |
| PD1  | Applications of Multiple Reflection of Sound                        | In-text questions pg. 169         |          |  |  |
| PD2  | Application of Ultrasound   | In-text questions pg. 170         |          |  |  |
| PD3  | SONAR   | In-text questions pg. 172         |          |  |  |
|  | <b>WEEK 38:</b> 27/11/23 <b>to</b> 02/12/23                         | Period C                          | ount: 00 |  |  |
| Annual F   | unction   |                                   |          |  |  |
|  | <b>WEEK 39:</b> 4/12/23 <b>to</b> 9/12/23                           | Period Co                         | unt: 01  |  |  |
| PD1  | Structure of Human Ear  | Read till discussed               |          |  |  |
| PD2  | Numericals  | Numericals                        |          |  |  |
| PD3  | Back Question and Answers discussed                                 | Back Question<br>and Answers      |          |  |  |

|   | <b>WEEK 40:</b> 11/12/23 <b>to</b> 16/12/23 | Period Co                                | unt: 03     |
|---|---|--|-------------|
| PD1                                       | Practicals                                  | Complete the<br>Practical in<br>Notebook |             |
| PD2                                       | Practicals                                  | Complete the<br>Practical in<br>Notebook |             |
| PD3                                       | Practicals                                  | Complete the<br>Practical in<br>Notebook |             |
|   | <b>WEEK 41:</b> 18/12/23 <b>to</b> 23/12/23 | Period Co                                | ount: 03    |
| PD1                                       | Revision                                    | Revision                                 |             |
| PD2                                       | Revision                                    | Revision                                 |             |
| PD3                                       | Revision                                    | Revision                                 |             |
|   | <b>WEEK 42:</b> 25/12/23 <b>to</b> 30/12/23 | Period Co                                | unt: 03     |
| PD1                                       | Revision                                    | Revision                                 |             |
| PD2                                       | Revision                                    | Revision                                 |             |
| PD3                                       | Revision                                    | Revision                                 |             |
| <b>WEEK 43:</b> 1/1/24 <b>to</b> 6/1/24   |   | Period Cour                              | nt: 00      |
| Winter Br                                 | eak   |  |             |
|   | <b>WEEK 44:</b> 8/1/24 <b>to</b> 13/1/24    | Period Cou                               | nt: 01      |
| PD1                                       | Revision                                    | Revision                                 |             |
|   | <b>WEEK 45:</b> 15/1/24 <b>to</b> 20/1/24   | Period Cou                               | ınt: 02     |
| PD1                                       | Revision                                    | Revision                                 |             |
| PD2                                       | Revision                                    | Revision                                 |             |
| <b>WEEK 46:</b> 22/1/24 <b>to</b> 27/1/24 |   | Period Cou                               | nt: 01      |
| PD1                                       | Revision                                    | Revision                                 |             |
| Subject co                                | ordinator: Er. Hemant Verma                 | HOD: Ms. A                               | agnita Naha |