



*Sir Padampat Singhania Education Centre*

**Kamla Nagar, Kanpur**

**Lesson Plan  
Session 2023 - 2024  
Class: X**

**Subject Book** : **Physics**  
: **Science (NCERT) - X**

**Subject Coordinator**  
Name: Er. Hemant Verma

Sign:

**Head of Department**  
Name: Ms. Agnita Naha

Sign:



# Sir Padampat Singhania Education Centre

**Kamla Nagar, Kanpur**

**Yearly Syllabus/Planning overview**

**Session: 2023 - 2024**

**Subject: Physics**

**Class : 10**

**No. of periods: 74**

Month	Assessed in	Lesson/s to be covered	Period Count
March	No Partial assessment	Light: Reflection and Refraction (Partial)	5
April	Test I + Test II + Pre-board Exams + Board Exams	Light: Reflection and Refraction (Full)	10
May	No Partial assessment	Test I + Human Eye and the Colourful World (Partial)	4
June	No Partial assessment	Human Eye and the Colourful World (Partial)	3
July	Test III + Pre-board Exams + Board Exams	Human Eye and the Colourful World (Full)	6
July	No Partial assessment	Test II + Electricity (Partial)	3
August	No Partial assessment	Test III + Electricity (Partial)	7
September	Test IV + Pre-board Exams + Board Exams	Test IV + Electricity (Full)	8
October	No Partial assessment	Magnetic effects of current (Partial)	8
November	Pre-board Exams + Board Exams	Magnetic effects of current (Full)	1
November		Practicals	7
December		Revision	7
January		Revision	5
February		Board Exams	0

Subject coordinator: Er. Hemant Verma

HOD: Ms. Agnita Naha



# Sir Padampat Singhania Education Centre

Kamla Nagar, Kanpur

## Monthly lesson plan overview

Session: 2023 - 2024

Subject : Physics

Class : 10

Book : Science (NCERT) - 10

No. of periods : 74

Date/Week		Lesson/s to be covered in classroom	Period Count	Status (Yes/No) (Reason if No)
From	To			
20.03.23	25.03.23	Introduction: Light- Reflection + Mirrors Basics + Image formations by Spherical Mirrors	3	
27.03.23	01.04.23	Uses of Spherical mirrors + Numerical related to mirror formula + Introduction: Refraction through glass slab + Refractive index	3	
03.04.23	08.04.23	Numerical of Refractive index	1	
10.04.23	15.04.23	Refraction by Spherical Lenses: Image formation	2	
17.04.23	22.04.23	Uses of Spherical Lenses + Numerical related to lens formula	3	
24.04.23	29.04.23	Power of lens + Back exercises + Intext Questions	3	
01.05.23	06.05.23	Revision of Test I	2	
08.05.23	13.05.23	Test 1 + Introduction to Human Eye	1	
15.05.23	20.05.23	Test 1 + Functions of different parts of human eye + Defects of vision: Myopia	2	
22.05.23	27.05.23	Defects of vision: Hypermetropia + Presbyopia	1	
29.05.23	03.06.23	Defects of vision + Summer 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	Refraction through Prism + Dispersion of white light through Prism	3	
03.07.23	08.07.23	Atmospheric Refraction + Scattering of Light	3	

10.07.23	15.07.23	Back Exercises + Intext Questions	2	
17.07.23	22.07.23	Revision of Test II + Test II	2	
24.07.23	29.07.23	Test II + Introduction: Electricity + Electric Current	2	
31.07.23	05.08.23	Electric Potential + Potential Difference + Electric Symbols + Electric Circuit	3	
07.08.23	12.08.23	Ohm's Law + Numerical related to Ohm's Law	3	
14.08.23	19.08.23	Resistance + Factors on which resistance depends	2	
21.08.23	26.08.23	Revision of Test III + Test III	1	
28.08.23	02.09.23	Test III	0	
04.09.23	09.09.23	Resistivity + Combination of Resistance	3	
11.09.23	16.09.23	Combination of Resistance + Heating effects of current + Applications	3	
18.09.23	23.09.23	Electric Power + Back Exercises + Intext Questions	2	
25.09.23	30.09.23	Revision of Test IV + Test IV	1	
02.10.23	07.10.23	Introduction: Magnetic effects of current + Oersted's Experiment	2	
09.10.23	14.10.23	Magnetic field lines and its properties + Magnetic field due to straight current carrying conductor	3	
16.10.23	21.10.23	Magnetic field due to current in a circular loop + Magnetic field due to current in solenoid + Force on current carrying conductor in a magnetic field	3	
23.10.23	28.10.23	Dussehra Holidays	0	
30.10.23	04.11.23	Back Question Answers + Intext Questions + Practical	3	
06.11.23	11.11.23	Practical	1	
13.11.23	18.11.23	Practical	2	
20.11.23	25.11.23	Practical	3	

27.11.23	02.12.23	Annual Function	0	
04.12.23	09.12.23	Revision + Pre- Board I	1	
11.12.23	16.12.23	Pre- Board I	0	
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	Pre-Board II	0	
05.02.24	10.02.24	Pre-Board II	0	

Subject coordinator: Er. Hemant Verma

HOD: Ms. Agnita Naha



# Sir Padampat Singhania Education Centre

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

**Subject : Physics**  
**Class : 10**

**No. of periods : 77**

Period	Topic/s to be covered in classroom	Homework	Status (Yes/No) (Reason if No)
<b>WEEK 01: 20/3/23 to 25/3/23</b>		<b>Period Count: 03</b>	
PD1	Introduction: Light- Reflection	Read till discussed	
PD2	Mirrors Basics: Plane Mirror + Spherical Mirror	Read till discussed	
PD3	Image formations by Spherical Mirrors	Fig 10.6	
<b>WEEK 02: 27/3/23 to 01/4/23</b>		<b>Period Count:03</b>	
PD1	Uses of Spherical mirrors + Sign Convention for Reflection by Spherical Mirrors	In-text question pg. 168 and pg. 171	
PD2	Magnification	In-text question pg. 176	
PD3	Introduction to Refraction: Glass Slab + Refractive Index	Draw diagram	
<b>WEEK 03: 03/4/23 to 08/4/23</b>		<b>Period Count: 01</b>	
PD1	Numerical related to Refractive Index	Practice	
<b>WEEK 04: 10/4/23 to 15/4/23</b>		<b>Period Count: 02</b>	
PD1	Refraction by Spherical Lenses + Image formation through Spherical Lenses	Read till discussed	
PD2	Image formation through Spherical Lenses	In-text question pg. 184	
<b>WEEK 05: 17/4/23 to 22/4/23</b>		<b>Period Count: 03</b>	
PD1	Uses of Spherical Lenses	Read till discussed	
PD2	Magnification through Lenses	Practice	
PD3	Numerical on Lenses	Practice	

<b>WEEK 06: 24/4/23 to 29/4/23</b>			<b>Period Count: 03</b>
PD1	Power of Lens	Read till discussed	
PD2	Intext Questions	Read till discussed	
PD3	Back Questions and Answers discussed	Back Questions and Answers	
<b>WEEK 07: 1/5/23 to 6/5/23</b>			<b>Period Count: 02</b>
PD1	Revision of Test I	Revision	
PD2	Revision of Test I	Revision	
<b>WEEK 08: 8/5/23 to 13/5/23</b>			<b>Period Count: 01</b>
PD1	Test I + Introduction: Human Eye + Power of Accommodation	Fig 11.1	
<b>WEEK 09: 15/5/23 to 20/5/23</b>			<b>Period Count: 02</b>
PD1	Test I + Functions of different parts of human eye	Read till Discussed	
PD2	Defects of Vision: Myopia	Read till Discussed	
<b>WEEK 10-11: 22/5/23 to 03/6/23</b>			<b>Period Count: 02</b>
PD1	Defects of Vision: Hypermetropia	Read till discussed	
PD2	Defects of Vision: Presbyopia	In-text question pg. 190	
<b>WEEK 12 - 14: 05/6/23 to 24/5/23</b>			<b>Period Count: 00</b>
<b>Summer Break</b>			
<b>WEEK 15: 26/6/23 to 01/7/23</b>			<b>Period Count: 03</b>
PD1	Refraction through Prism	Fig 11.4	
PD2	Dispersion of white light through Prism	Fig 11.5	
PD3	Dispersion of white light through Prism Contd...	Fig 11.6	
<b>WEEK 16: 3/7/23 to 8/7/23</b>			<b>Period Count: 03</b>

PD1	Atmospheric Refraction: Twinkling of Stars + Advance Sunrise and Delayed Sunset	Fig 11.8, 11.9 and 11.10	
PD2	Scattering of Light: Tyndall Effect	Read till discussed	
PD3	Scattering of Light: Colour of Sky + Colour of Sunrise and Sunset	Fig 11.11 and 11.12	
<b>WEEK 17: 10/7/23 to 15/7/23</b>		<b>Period Count: 02</b>	
PD1	Intext Questions	Read till discussed	
PD2	Back Questions and Answers discussed	Back Questions and Answers	
<b>WEEK 18: 17/7/23 to 22/7/23</b>		<b>Period Count: 02</b>	
PD1	Revision of Test II + Test II	Revise for Test II	
PD2	Revision of Test II + Test II	Revise for Test II	
<b>WEEK 19: 24/7/23 to 29/7/23</b>		<b>Period Count: 02</b>	
PD1	Test II + Introduction: Electricity	Read till discussed	
PD2	Electric charges + Electric Current	In-text questions pg. 200	
<b>WEEK 20: 31/7/23 to 5/8/23</b>		<b>Period Count: 03</b>	
PD1	Electric Potential	Read till discussed	
PD2	Potential Difference	In-text questions pg. 202	
PD3	Electric Symbols + Electric Circuit	Draw and learn table 12.1	
<b>WEEK 21: 7/8/23 to 12/8/23</b>		<b>Period Count: 03</b>	
PD1	Ohm's Law	Read till discussed	
PD2	Ohm's Law	Read till discussed	
PD3	Numerical of Ohm's Law	Practice	
<b>WEEK 22: 14/8/23 to 19/8/23</b>		<b>Period Count: 02</b>	
PD1	Resistance	Read Activity 12.1 and 12.2	



PD2	Factors on which resistance depends	Read Activity 12.3	
WEEK 23: 21/8/23 to 26/8/23		Period Count: 01	
PD1	Revision of Test III	Revise	
WEEK 24: 28/8/23 to 02/9/23		Period Count: 00	
Test III			
WEEK 25: 04/9/23 to 9/9/23		Period Count: 03	
PD1	Resistivity	In-text question pg. 209	
PD2	Combination of Resistances: Series	In-text question pg. 213	
PD3	Combination of Resistances: Parallel	In-text question pg. 216	
WEEK 26: 11/9/23 to 16/9/23		Period Count: 03	
PD1	Numerical of combination of resistance	Read till discussed	
PD2	Heating effects of Current	Read till discussed	
PD3	Applications of Heating effects of Current	In-text question pg. 218	
WEEK 27: 18/9/23 to 23/9/23		Period Count: 02	
PD1	Electric Power	In-text question pg. 220	
PD2	In-text Questions and Back Questions and Answers discussed	Back Questions and Answers	
WEEK 28: 25/9/23 to 30/9/23		Period Count: 01	
PD1	Revision of Test IV	Revise	
WEEK 29: 02/10/23 to 7/10/23		Period Count: 02	
PD1	Introduction: Magnetic Effects of Current	Introduction: Magnetic Effects of Current	
PD2	Oersted's Experiment Read Activity 13.4	Oersted's Experiment Read Activity 13.4	
WEEK 30: 9/10/23 to 14/10/23		Period Count: 03	

PD1	Magnetic Field lines + Properties	Read till discussed	
PD2	Field due to straight conductor carrying current	Read till discussed	
PD3	Right hand thumb Rule	In-text question pg. 228	
WEEK 31: 16/10/23 to 21/10/23		Period Count: 03	
PD1	Field due to circular loop carrying current	Read Activity 13.6	
PD2	Field due to current in solenoid	In-text question pg. 229	
PD3	Force on a current carrying conductor in a magnetic field	In-text question pg. 231	
WEEK 32: 23/10/23 to 28/10/23		Period Count: 00	
Dusshera Holidays			
WEEK 33: 30/10/23 to 4/11/23		Period Count: 03	
PD1	Intext Questions	Read till discussed	
PD2	Back Questions and Answers discussed	Back Questions and Answers	
PD3	Practicals	Complete the Practical in Notebook	
WEEK 34: 6/11/23 to 11/11/23		Period Count: 01	
PD1	Practicals	Complete the Practical in Notebook	
WEEK 35: 13/11/23 to 18/11/23		Period Count: 02	
PD1	Practicals	Complete the Practical in Notebook	
PD2	Practicals	Complete the Practical in Notebook	
WEEK 36: 20/11/23 to 25/11/23		Period Count: 03	
PD1	Practicals	Complete the Practical in Notebook	
PD2	Practicals	Complete the Practical in Notebook	
PD3	Practicals	Complete the Practical in Notebook	

**WEEK 37: 27/11/23 to 02/12/23****Period Count: 00****Annual Function****WEEK 38: 4/12/23 to 9/12/23****Period Count: 01**

PD1

Revision of Pre-Board I

Revise for Pre-  
Board I**WEEK 39: 11/12/23 to 16/12/23****Period Count: 00****Pre-Boards I****WEEK 40: 18/12/23 to 23/12/23****Period Count: 03**

PD1

Revision

Revision

PD2

Revision

Revision

PD3

Revision

Revision

**WEEK 41: 25/12/23 to 30/12/23****Period Count: 03**

PD1

Revision

Revision

PD2

Revision

Revision

PD3

Revision

Revision

**WEEK 42: 1/1/24 to 6/1/24****Period Count: 00****Winter Break****WEEK 43: 8/1/24 to 13/1/24****Period Count: 01**

PD1

Revision of Pre-Board II

Revise for Pre-  
Board II**WEEK 44: 15/1/24 to 20/1/24****Period Count: 02**

PD1

Revision

Revise for Pre-  
Board II

PD2

Revision

Revise for Pre-  
Board II**WEEK 45: 22/1/24 to 27/1/24****Period Count: 02**

PD1	Revision	Revise for Pre-Board II	
PD2	Revision	Revise for Pre-Board II	
<b>WEEK 46 - 47: 29/1/24 to 10/2/24</b>		<b>PRE – BOARD II</b>	

Subject coordinator: Er. Hemant Verma

HOD: Ms. Agnita Naha