

**SAMPLE CONTENT**

**EXam EXPerts**



A COMPREHENSIVE COLLECTION OF 38  
YEARS OF NEET & AIPMT QUESTIONS

**38**  
YEARS

From 1988 to 2025

**NEET (UG)**

Chapterwise and Topicwise

**P**REVIOUS **S**OLVED **P**APERS  
**CHEMISTRY**



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Smart  
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NCERT  
Page Locator

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MCQs

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Re-Tests covered

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**38****YEARS****1988 - 2025****1500+ MCQs**

# PREVIOUS SOLVED PAPERS

Chapter-wise &amp; Topic-wise

## NEET CHEMISTRY

### Key Features

-  A comprehensive collection of over 38 years of AIPMT/NEET questions
-  1500+ Questions
-  Covers all the Retests
-  Smart Key
-  NCERT Page Number Mapping
-  Top Ranker's Repository

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**TEID: 5263****P.O. No. 19780**

## PREFACE

**Target's NEET Chemistry: PSP (Previous Solved Papers)** is a comprehensive compilation of NEET (UG) (formerly AIPMT) Chemistry questions spanning 38 years, from 1988 to 2025. Carefully organized chapter-wise and topic-wise, this book presents questions in a chronological sequence to help build a strong conceptual foundation and track the evolution of the NEET exam pattern.

To ensure complete coverage, questions from NEET (UG) exams conducted more than once have been included, such as 2013 (Karnataka), 2015 (Re-Test), 2016 (Phase II), 2019 (Odisha), 2020 (Phase II), 2023 (Manipur), and 2024 (Re-Test).

To boost your preparation, we've included the following features:

- i. **Smart Keys:** Innovative shortcuts, mnemonics, and lateral thinking techniques designed to improve problem-solving speed and accuracy.
- ii. **Top Ranker's Repository:** A selection of game-changing questions in every chapter that differentiate top performers.
- iii. **NCERT Page Number Mapping:** For every question, we've included page number tags from both the new NCERT textbook (post-rationalization) and the old NCERT textbook (pre-rationalization). This dual referencing has been provided because many concepts from NEET syllabus are no longer present in the new textbooks. Including the old textbook page numbers ensures that students can easily locate and study these essential topics.
- iv. **Analytical Insights:** Each chapter starts with a graphical (%-wise) analysis of topic weightage across 38 years (1988–2025) and 13 years (2013–2025) for NEET (UG), enabling strategic preparation to excel in Chemistry with confidence.

We hope this collection of carefully curated questions and insights becomes an essential tool in your NEET (UG) preparation. Your journey to mastering Chemistry starts here, and we are confident this book will support you every step of the way.

For any suggestions or feedback, please write to us at [mail@targetpublications.org](mailto:mail@targetpublications.org)

*Wishing all aspirants the very best!*

Publisher

**Edition:** Eight

### Disclaimer

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## Qualifying Cut off Marks for NEET (UG) (Last 3 Years)

Category	Qualifying Percentile	Qualifying Cut off Marks 2024	Qualifying Cut off Marks 2023	Qualifying Cut off Marks 2022
UR/EWS	50	720-162	720-137	715-117
OBC/ SC/ ST	40	161-127	136-107	116- 93
UR/EWS -PwD	45	161-144	136-121	116-105
SC/ OBC-PwD	40	143-127	120-107	104-93
ST/Pwd	40	142-127	120-108	104-93

## Question Type wise Analysis

Question Type	2023	2024	2025
Assertion-Reason	4	0	1
Graph based	1	1	1
Match the columns	2	7	6
MCQ	37	35	31
Statement Based	6	7	6

**Note:** The symbol \* in the index represents the chapters and topics which are excluded from the latest NCERT textbooks, but are part of NEET (UG) Syllabus. These topics are also enumerated using alphabets rather than numbers.

The symbol  represents the questions which are part of Top Ranker's Repository.

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Unlock expert-backed video tips and solutions to the Top Ranker's Repository questions of NEET (UG) 2025.

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Get NEET-ready! Scan the given QR code in *Quill - The Padhai App* to access the detailed NEET (UG) syllabus.

## Frequently Asked Questions

### Why this book?

- This book acts as a go-to tool to find all the AIPMT/NEET questions over the past 38 years in one place.
- The topic-wise arrangement of questions provides the breakdown of a chapter into its important components which will enable students to design an effective learning plan.
- The graphical analysis guides students in ascertaining their own preparation for a particular topic.

### Why the need for two graphs?

Admission for undergraduate and post graduate medical courses underwent a critical change with the introduction of NEET in 2013. Although it received a huge backlash and was criticised for the following two years, NEET went on to replace AIPMT in 2016. The introduction of NEET brought in a few structural differences in terms of how the exam was conducted. Although the syllabus has majorly remained the same, the chances of asking a question from a particular topic are seen to vary slightly with the inception of NEET.

The two graphs will fundamentally help the students to understand that the (weightage) distribution of a particular chapter can vary i.e., a particular topic having the most weightage for AIPMT may not necessarily be the topic with the most weightage for NEET.

### How are the two graphs beneficial to the students?

- The two graphs provide a topic's weightage distribution over the past 38 years (for AIPMT/NEET) and over the past 13 years (for NEET-UG).
- The students can use these graphs as a self-evaluation tool by analysing and comparing a particular topic's weightage with their preparation of the topic. This exercise would help the students to get a clear picture of their strengths and weaknesses based on the topics.
- Students can also use the graphs as a source to know the most important as well as least important topics as per the weightage of a particular chapter which will further help them in planning the study structure of a particular chapter.

*(Note: The percentage-wise weightage analysis of topics is solely for the knowledge of students and does not guarantee questions from topics having the most weightage, in future exams.*

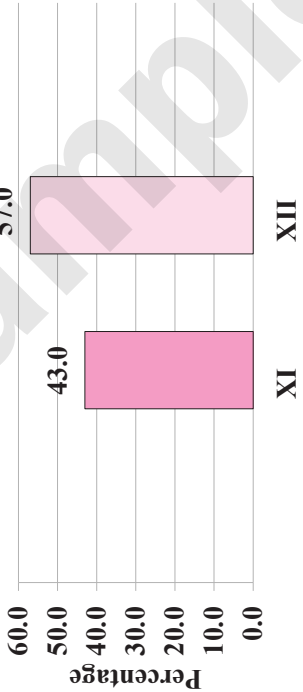
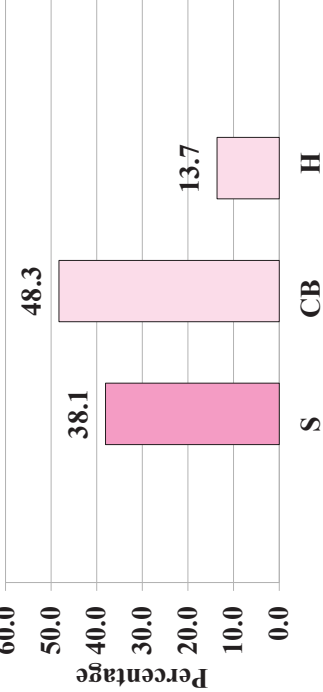
*Question classification of a topic is done at the authors' discretion and may vary with respect to another individual.)*

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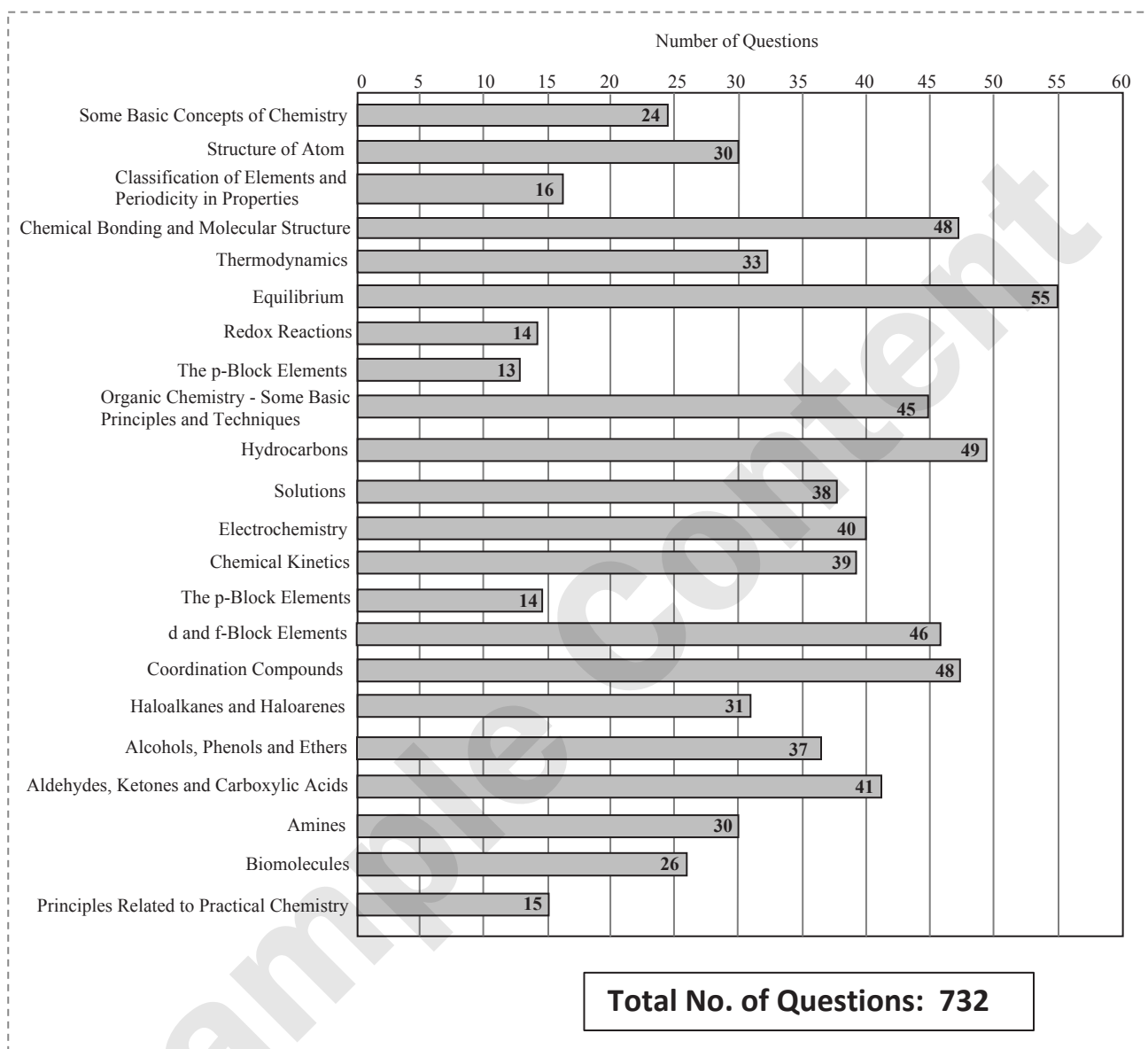
Chapter No.	Textbook Chapter No.	Chapter Name	Page No.
<b>Std. XI</b>			
1	1	Some Basic Concepts of Chemistry	1
2	2	Structure of Atom	6
3	3	Classification of Elements and Periodicity in Properties	13
4	4	Chemical Bonding and Molecular Structure	17
5	5	Thermodynamics	26
6	6	Equilibrium	34
7	7	Redox Reactions	45
8	*	The p-Block Elements	48
9	8	Organic Chemistry – Some Basic Principles and Techniques	50
10	9	Hydrocarbons	59
<b>Std. XII</b>			
1	1	Solutions	70
2	2	Electrochemistry	77
3	3	Chemical Kinetics	85
4	*	The p-Block Elements	93
5	4	The d and f-Block Elements	96
6	5	Coordination Compounds	104
7	6	Haloalkanes and Haloarenes	111
8	7	Alcohols, Phenols and Ethers	118
9	8	Aldehydes, Ketones and Carboxylic Acids	126
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		Answers & Solutions	155



## Statistical analysis of papers (2013 to 2025)

 <table border="1"> <caption>Percentage of questions asked from class XI and XII</caption> <thead> <tr> <th>Class</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>XI</td> <td>43.0</td> </tr> <tr> <td>XII</td> <td>57.0</td> </tr> </tbody> </table>	Class	Percentage	XI	43.0	XII	57.0	 <table border="1"> <caption>Percentage of questions asked from NCERT Textbooks</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>38.1</td> </tr> <tr> <td>CB</td> <td>48.3</td> </tr> <tr> <td>H</td> <td>13.7</td> </tr> </tbody> </table>	Category	Percentage	S	38.1	CB	48.3	H	13.7
Class	Percentage														
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<p><b>Based on NEET (UG) syllabus of class XI and XII</b></p>	<p><b>S – Straight forward:</b> Questions whose answers can be directly and easily answered by the information given in NCERT Textbooks.</p> <p><b>CB – Concept Based:</b> These questions require students to identify and apply the appropriate concepts which they studied from NCERT Textbooks.</p> <p><b>H – Higher Order Thinking Skills:</b> The most Challenging Questions that require application of various concepts and encourage students to think beyond the information given in the textbook.</p>														
<p style="text-align: center;"><b>Analysis</b></p>															
<ul style="list-style-type: none"> <li>➤ <b>Standard wise analysis</b> shows that in Chemistry the number of questions asked from class XI are more. However, students are suggested to focus equally on the NEET (UG) syllabus of class XI and XII.</li> <li>➤ In <b>chemistry</b>, higher percentage of questions are concept based which shows that the entrance test emphasizes a lot on understanding and application of concepts. Students are advised to focus on the application of formulas, concepts along with thorough revision while preparing for the entrance test.</li> </ul>															

## Chapter-wise Weightage Analysis of past 13 Years (2013 Onwards)





## Based on the New Syllabus

### CHEMISTRY Std. XI

Sr. No.	Topic Name	2013	2013* Karnataka	2014	2015	2015* Re-Test	2016 (Phase I)	2016* (Phase II)	2017	2018	2019	2019* Odisha	2020 (Phase I)	2020* (Phase II)	2021	2022	2023	2023* Manipur	2024	2024* Retest	2025	Total
1	Some Basic Concepts of Chemistry	0	1	3	1	3	1	1	0	2	1	0	1	1	1	1	1	0	3	1	2	24
2	Structure of Atom	3	1	2	1	1	1	2	1	1	2	2	0	1	1	2	1	2	2	2	2	30
3	Classification of Elements and Periodicity in Properties	0	1	1	1	1	0	0	0	0	1	0	1	1	1	1	1	1	2	1	2	16
4	Chemical Bonding and Molecular Structure	4	4	3	5	1	2	2	3	1	1	2	2	2	3	2	2	2	2	3	2	48
5	Thermodynamics	0	2	3	1	1	1	1	2	1	2	2	3	2	2	1	1	1	3	3	1	33
6	Equilibrium	3	4	4	3	3	3	3	3	3	3	3	2	2	1	2	2	2	3	3	3	55
7	Redox Reactions	0	0	0	0	0	0	1	0	2	2	1	1	1	1	0	1	1	1	1	1	14
8	The p-Block Elements*	1	0	0	0	1	0	0	2	2	2	1	0	1	0	0	1	2	0	0	0	13
9	Organic Chemistry - Some basic Principle and techniques	2	5	1	5	1	0	0	3	3	2	1	2	2	2	1	2	2	3	4	4	45
10	Hydrocarbons	4	2	0	2	3	3	6	3	1	3	2	2	2	3	1	2	1	3	2	4	49
	<b>Total</b>	17	20	17	19	15	11	16	17	16	19	14	14	15	15	11	14	14	22	20	21	327

## Based on the New Syllabus

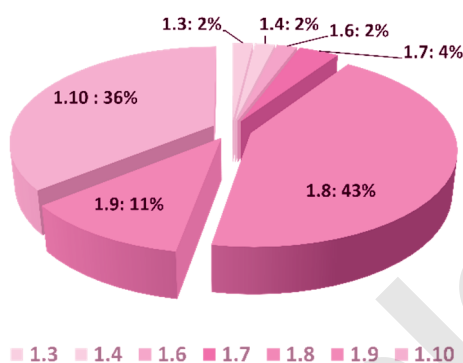
### CHEMISTRY Std. XII

Sr. No.	Topic Name	2013	2013* Karnataka	2014	2015	2015* Re-Test	2016 (Phase I)	2016* (Phase II)	2017	2018	2019	2019* Odisha	2020 (Phase I)	2020* (Phase II)	2021	2022	2023	2023* Manipur	2024	2024* Retest	2025	Total
1	Solutions	2	1	1	3	2	2	2	2	0	2	3	3	2	2	1	0	2	2	3	3	38
2	Electrochemistry	3	2	3	1	1	1	5	1	1	2	2	2	2	2	3	2	2	2	2	1	40
3	Chemical Kinetics	2	2	0	2	1	2	1	2	2	2	2	2	2	2	2	2	2	3	3	3	39
4	The p-Block Elements*	0	0	1	0	1	1	0	0	1	1	0	0	0	2	1	0	0	2	2	2	14
5	The d- and f-block elements	3	2	4	3	3	2	1	2	2	1	2	2	2	2	2	2	2	2	5	2	46
6	Coordination Compounds	2	6	2	3	4	1	2	3	3	1	1	1	1	2	2	2	2	4	3	3	48
7	Haloalkanes and Haloarenes	0	0	2	2	4	2	1	2	1	0	1	1	1	2	2	1	3	2	2	2	31
8	Alcohols, Phenols and Ethers	1	0	3	1	1	1	0	2	4	1	3	2	2	2	3	3	2	4	2	0	37
9	Aldehydes, Ketones and Carboxylic Acids	2	1	1	2	2	3	3	2	1	1	0	2	2	2	5	4	4	1	0	3	41
10	Amines	1	1	1	1	3	1	1	2	1	1	1	0	1	1	2	2	2	2	4	2	30
11	Biomolecules	0	1	2	0	0	3	3	1	2	1	1	2	2	1	1	1	1	1	1	2	26
12	Principles Related to Practical Chemistry	0	3	1	1	1	0	0	0	0	0	0	1	0	1	0	0	0	3	3	1	15
	Total	16	19	21	19	23	19	19	19	18	13	16	18	17	21	24	19	22	28	30	24	405

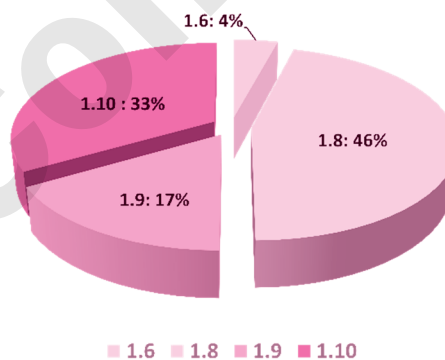
# Some Basic Concepts of Chemistry

- |  |  |
|--|--|
| 1.1 Importance of Chemistry                    | 1.6 Dalton's Atomic Theory                         |
| 1.2 Nature of Matter                           | 1.7 Atomic and Molecular Masses                    |
| 1.3 Properties of Matter and their Measurement | 1.8 Mole Concept and Molar Masses                  |
| 1.4 Uncertainty in Measurement                 | 1.9 Percentage Composition                         |
| 1.5 Laws of Chemical Combinations              | 1.10 Stoichiometry and Stoichiometric Calculations |

**38 Years NEET/AIPMT Analysis  
(Percentage-wise weightage of topics)**



**13 Years NEET Analysis (2013 Onwards)  
(Percentage-wise weightage of topics)**



[Note: Till date no questions have been asked from the topics: 1.1, 1.2 and 1.5.]

## 1.3 Properties of Matter and their Measurement

1. The dimensions of pressure are the same as that of \_\_\_\_\_. [1995]
- (A) force per unit volume  
(B) energy per unit volume  
(C) force  
(D) energy

## 1.4 Uncertainty in Measurement

1. Given the numbers: 161 cm, 0.161 cm, 0.0161 cm. The number of significant figures for the three numbers is \_\_\_\_\_. [1998]
- (A) 3, 3 and 4 respectively  
(B) 3, 4 and 4 respectively  
(C) 3, 4 and 5 respectively  
(D) 3, 3 and 3 respectively

## 1.6 Dalton's Atomic Theory

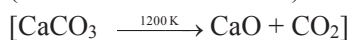
1. Dalton's Atomic theory could not explain which of the following? [2025]
- (A) Law of multiple proportion  
(B) Law of gaseous volume  
(C) Law of conservation of mass  
(D) Law of constant proportion

## 1.7 Atomic and Molecular Masses

1. Boron has two stable isotopes,  $^{10}\text{B}$  (19%) and  $^{11}\text{B}$  (81%). Calculate average at.wt. of boron in the periodic table. [1990]
- (A) 10.8  
(B) 10.2  
(C) 11.2  
(D) 10.0



18. The right option for the mass of  $\text{CO}_2$  produced by heating 20 g of 20 % pure limestone is (Atomic mass of Ca = 40)



[2023]

- (A) 1.76 g (B) 2.64 g  
(C) 1.32 g (D) 1.12 g

19. 1 gram of sodium hydroxide was treated with 25 mL of 0.75 M HCl solution, the mass of sodium hydroxide left unreacted is equal to

[2024]

- (A) Zero mg (B) 200 mg  
(C) 750 mg (D) 250 mg



## Answer Key

1.3	1. (B)
1.4	1. (D)
1.6	1. (B)
1.7	1. (A) 2. (D)
1.8	1. (D) 2. (A) 3. (C) 4. (D) 5. (B) 6. (A) 7. (D) 8. (A) 9. (B) 10. (A) 11. (B) 12. (C) 13. (C) 14. (D) 15. (B) 16. (D) 17. (A) 18. (A) 19. (C) 20. (A) 21. (C) 22. (A) 23. (D)
1.9	1. (C) 2. (A) 3. (B) 4. (B) 5. (B) 6. (D)
1.10	1. (D) 2. (C) 3. (B) 4. (A) 5. (C) 6. (A) 7. (B) 8. (C) 9. (A) 10. (B) 11. (B) 12. (A) 13. (A) 14. (B) 15. (C) 16. (B) 17. (D) 18. (A) 19. (D)



## Std. XI

## 1. Some Basic Concepts of Chemistry

## 1.3 Properties of Matter and their Measurement

## 1. (B) [NCERT (New) Pg. no. Multifarious]

Quantity	Dimensions
Pressure	$[M L^{-1} T^{-2}]$
Force per unit volume	$[M L^{-2} T^{-2}]$
Energy per unit volume	$[M L^{-1} T^{-2}]$
Force	$[M L T^{-2}]$
Energy	$[M L^2 T^{-2}]$

## 1.4 Uncertainty in Measurement

## 1. (D) [NCERT (New) Pg. no. 12]

161 has three significant figures as all are non-zero digits.

0.161 has three significant figures as zero on the left of the first non-zero digit is not significant.

0.0161 also has three significant figures as zeros on the left of the first non-zero digit are not significant.

## 1.6 Dalton's Atomic Theory

## 1. (B) [NCERT (New) Pg. no. 16]

## 1.7 Atomic and Molecular Masses

## 1. (A) [NCERT (New) Pg. no. 17]

$$\begin{aligned} \text{Average atomic mass} &= \frac{\text{Sum of (Isotopic mass} \times \text{its abundance)}}{100} \\ \text{Average atomic mass} &= \frac{(19 \times 10) + (81 \times 11)}{100} \\ &= 10.81 \approx 10.8 \end{aligned}$$

## 2. (D) [NCERT (New) Pg. no. 17]

$$\begin{aligned} \text{Average atomic mass} &= \frac{\text{Sum of (Isotopic mass} \times \text{its abundance)}}{100} \\ \text{Average isotopic mass of X} &= \frac{(200 \times 90) + (199 \times 8) + (202 \times 2)}{100} \\ &= 199.96 \approx 200 \text{ amu.} \end{aligned}$$

## 1.8 Mole Concept and Molar Mass

## 1. (D) [NCERT (New) Pg. no. 18]

$$\begin{aligned} \text{At NTP,} \\ 1 \text{ mol N}_2\text{O} &= 22400 \text{ cc N}_2\text{O} \\ &= 6.02 \times 10^{23} \text{ N}_2\text{O molecules} \\ \therefore 1 \text{ cc of N}_2\text{O} &= \frac{6.02 \times 10^{23}}{22400} \text{ molecules} \end{aligned}$$

Each  $\text{N}_2\text{O}$  molecule contains 3 atoms,  
Hence,

$$\begin{aligned} \therefore 1 \text{ cc N}_2\text{O} &= \frac{3 \times 6.02 \times 10^{23}}{22400} \\ &= \frac{1.8 \times 10^{22}}{224} \text{ atoms} \end{aligned}$$

Nitrogen contains 7 electrons while O contains 8 electrons. Hence, the number of electrons in one molecule of  $\text{N}_2\text{O}$  is 22.

Hence,

$$\begin{aligned} \text{Number of electrons in 1 cc N}_2\text{O} &= \frac{6.02 \times 10^{23}}{22400} \times 22 \\ &= \frac{1.32}{224} \times 10^{23} \text{ electrons} \end{aligned}$$

## 2. (A) [NCERT (New) Pg. no. 18]

Number of moles in 4.4 g of  $\text{CO}_2$

$$= \frac{4.4}{44} = 0.1$$

Number of oxygen atoms in 1 mole of  $\text{CO}_2$   
 $= 2 \times N_A$

$$\begin{aligned} \therefore \text{Number of oxygen atoms in 0.1 mole of CO}_2 &= 0.1 \times 2 \times N_A \\ &= 0.2 \times 6.022 \times 10^{23} = 1.20 \times 10^{23} \end{aligned}$$

## 3. (C) [NCERT (New) Pg. no. 18]

One litre of  $\text{O}_2$  contains  $N$  molecules at  $15^\circ\text{C}$  and 150 mmHg pressure. If 1 L of one gas contains  $N$  molecules then 2 L of any gas under the same conditions will contain  $2N$  molecules.

## 4. (D) [NCERT (New) Pg. no. 18]

$$1 \text{ L of air} = \frac{21}{100} \times 1000 = 210 \text{ mL of O}_2$$

$$\therefore 22400 \text{ mL} = 1 \text{ mole}$$

$$\therefore 210 \text{ mL} = \frac{1}{22400} \times 210 = 0.0093 \text{ mol}$$

## 5. (B) [NCERT (New) Pg. no. 18]

Weight of volatile gas = 0.24 g

Volume of gas = 45 mL

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$

$$\begin{aligned} \text{Mass of 45 mL of H}_2 &= 0.089 \times 0.045 \\ &= 4.005 \times 10^{-3} \text{ g} \end{aligned}$$

Vapour density

$$\begin{aligned} &= \frac{\text{Mass of certain volume of vapour}}{\text{Mass of same volume of hydrogen}} \\ &= \frac{0.24}{4.005 \times 10^{-3}} = 59.93 \end{aligned}$$



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