

ગુજરાત રાજ્યના શિક્ષણવિભાગના પત્ર-ક્રમાંક
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CHEMISTRY

Standard 12

(Semester IV)



PLEDGE

India is my country.
All Indians are my brothers and sisters.
I love my country and I am proud of its rich and
varied heritage.
I shall always strive to be worthy of it.
I shall respect my parents, teachers and all my
elders and treat everyone with courtesy.
I pledge my devotion to my country and its people.
My happiness lies in their well-being and prosperity.

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Gujarat State Board of School Textbooks
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PREFACE

The Gujarat State Secondary and Higher Secondary Education Board has prepared new syllabi in accordance with the new national syllabi prepared by N.C.E.R.T. based on N.C.F.-2005 and core-curriculum. These syllabi are sanctioned by the Government of Gujarat.

It is a pleasure for the Gujarat State Board of School Textbooks to present before the students this textbook of **Chemistry for Standard 12 (Semester IV)** prepared according to the new syllabus.

Before publishing the textbook, its manuscript has been fully reviewed by experts and teachers teaching at this level. Following the suggestions given by teachers and experts, we have made necessary changes in the manuscript before publishing the textbook.

The Board has taken special care to ensure that this textbook can prove to be interesting, useful and free from errors. However, we welcome any suggestions, from people interested in education, to improve the quality of the textbook.

H. K. Patel GAS **Dr. Nitin Pethani**

Director

Executive President

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FUNDAMENTAL DUTIES

It shall be the duty of every citizen of India :*

- (a) To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) To cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) To uphold and protect the sovereignty, unity and integrity of India;
- (d) To defend the country and render national service when called upon to do so;
- (e) To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) To value and preserve the rich heritage of our composite culture;
- (g) To protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- (h) To develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) To safeguard public property and to abjure violence;
- (j) To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

* Constitution of India : Section 51-A

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About This Textbook...

It has been decided by the Central Government of India, that only one competitive examination will be conducted at national level for the study of higher education. As a result of this planning, the formation of Core-Curriculum took place. The purpose of this was that there must be same syllabus in the subjects of Science stream for national competitive examination. The same syllabus can be possible if the book is prepared according to N.C.F.-2005.

A new syllabus in Chemistry was prepared by experts and teachers on the basis of core-curriculum and N.C.F.-2005, by the Gujarat State Secondary and Higher Secondary Education Board.

'Education Without Burden', an initiative undertaken by the Government of Gujarat will prove beneficial to students in semester system. Gujarat State Board of School Textbooks made positive arrangements for students to have advantage of the expertise of the teachers from Schools and Colleges having their own teaching experience, and experience as paper setters for GUJCET examination as well as Higher Secondary Examination Board. The writers associated with the writing of this book have written units which are reviewed by other teachers, experts and reviewers to make this book useful at national level by carrying out proper additions and alterations.

One important matter has been added. Changes have been incorporated in different words in this new book viz. atomic mass instead of atomic weight, molecular mass instead of molecular weight, enthalpy instead of energy, bar instead of atmosphere as well use of unit pascal. The word like reactivity will appear to be unknown but its inclusion in the modern study was found to be essential. In addition to this, in this existing book, instead of the nomenclature, units etc. the modern SI units, method of nomenclature etc. as in NCERT book are used in the text. This will appear somewhat new but being very useful in competitive examinations and to meet the new challenges and to obtain achievement in present education system, it should be accepted.

Competitive examinations like JEE and NEET are conducted at the national level. SI units are found in question papers. In our GUJCET examination, as SI units were not used, students found it difficult at these competitive examinations but we are sure that the students will shine out bringing glory to the state at national level.

The subject content, presentation, examples are presented in this book in such a way that the students will find easy to understand. Although attempts have been made to ensure quality at each level, we welcome suggestions from teachers and well-wishers. The suggestions, if found relevant, will be incorporated in the revised edition.

'To send proper suggestion is your work and to implement it is ours.' By keeping this goal, the students of Gujarat State may obtain success at national level. We expect you to join us in this pursuit of excellence.

- Authors

