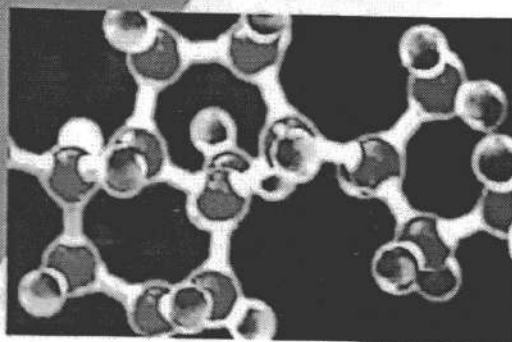


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A Text Book of

# ORGANIC CHEMISTRY



For T. Y. B. Sc. Course CH- 343  
Semester-IV (Second Term)

ADHAV - KONDEDESHMUKH - KALE  
SHINDE - BAHULE



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# ORGANIC CHEMISTRY

[MECHANISM, NATURAL PRODUCTS AND SPECTROSCOPY]

T. Y. B. Sc. SEMESTER - IV (SECOND TERM)  
Course - CH-343

(According to the New Revised Syllabus of  
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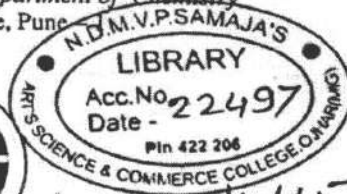
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## PREFACE

It is a great pleasure to hand over the text book of **Organic Chemistry (Second Term)** to the students of **T.Y.B.Sc class (Chemistry Principle)** of **Savitribai Phule Pune University**. In the teaching and learning of **Organic Chemistry** the impact of introducing mechanistic approach become essential. The mechanistic approach not only explains, inter relates the known facts but can also predict the possibility of formation of new products. Study of mechanism of organic reactions has therefore become not only necessary but most interesting and highly challenging to the Organic chemists.

This book has been written according to the new revised syllabus introduced from June 2015. We have tried our best using our versatile experience to make this book quite informative as well as simple and lucid.

Chapter one deals with carbanion reactions, Chapter Second deals with retrosynthetic approach, and Chapter third with rearrangement reactions.

In the chapters 4 to 7 we introduce the students with spectroscopic methods used for structure determination of organic compounds. Basic principles and applications of spectroscopic methods are explained in a simple and lucid language.

Chapter 8 deals with the spectroscopic problems based on U.V., I.R. and P.M.R. spectroscopy. In the 9<sup>th</sup> chapter, we introduce the students with natural products and approach of structure determination of terpenoids and alkaloids.

At the end of each chapter there are adequate and properly graded exercises, questions and problems. We hope that, solving these problems will not only make the students perfect but the subject more interesting and challenging.

We are sure that this book will be equally useful to the teacher and the students. We are confident that this book will provide the exact requirement of students.

We are grateful to our publisher Mr. D. N. Panse, for his keen interest in publishing this book.

We shall be glad to receive any suggestions for improving the contents of this book.

Nov. 2015

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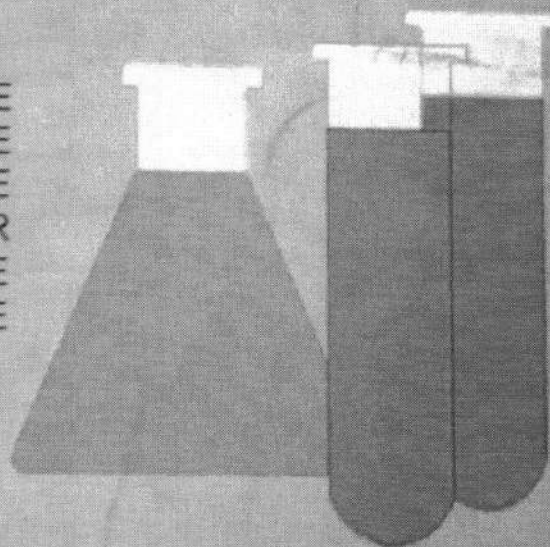
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# PRACTICAL CHEMISTRY

For T. Y. B. Sc.  
Course

CH-347 Physical Chemistry  
CH-348 Inorganic Chemistry  
CH-349 Organic Chemistry

ADHAV-DATE  
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KHOT-DOKE  
VHANKATE-POKHARKAR  
SHINDE-HANGARGE  
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## PRACTICAL CHEMISTRY

Course No. CH - 347 : Physical Chemistry

Course No. CH - 348 : Inorganic Chemistry

Course No. CH - 349 : Organic Chemistry

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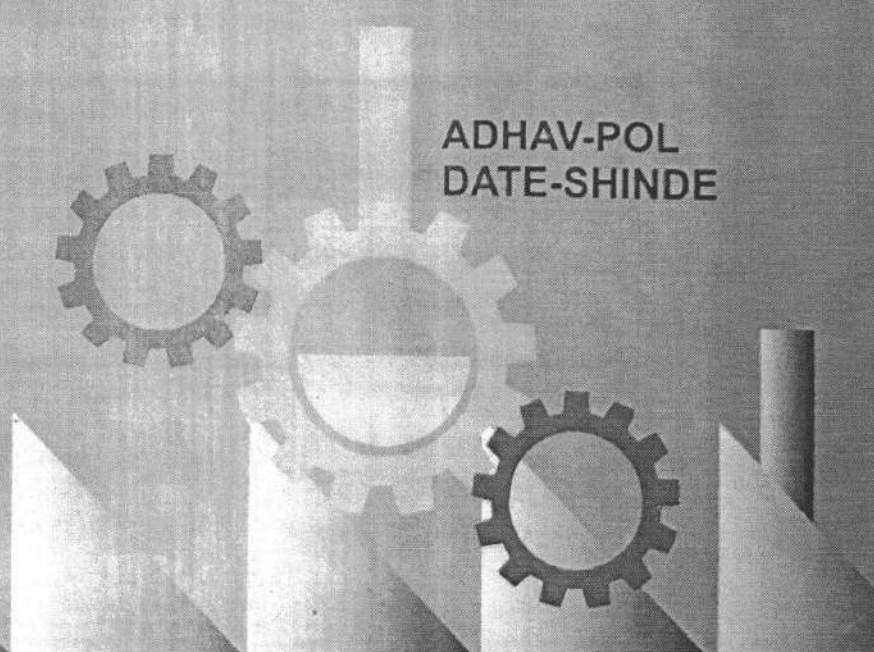
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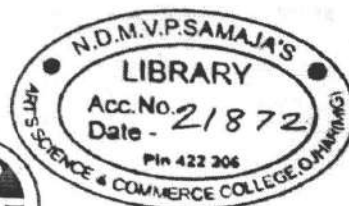
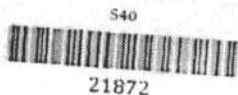
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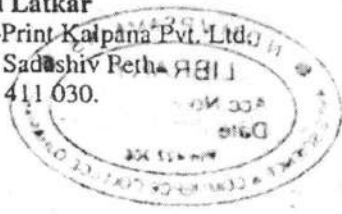
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It is a great pleasure to hand over the text book of **Industrial Chemistry, CH-335** in the hands of T.Y.B.Sc. students (Chemistry Principle) of Savitribai Phule, Pune University. This text book is written as per **New Revised syllabus** (to be implemented from June 2015) prepared by the Savitribai Phule, Pune University.

In this text book attempt has been made to make students familiar with **Inorganic Industries** like cement, ceramic, glass and **Organic Industries** like - Dyes, soaps and detergents, pharmaceutical and fuel.

We have made efforts in this book to explain chemistry of the plants with diagrams. In most cases detailed descriptions have been given to help students in drawing the figures and flow sheets. At the end of each chapter exercises are included. Multiple choice and true of false type questions are also given. We hope the readers find this book most useful.

We are very much thankful to **Mr. Avinash and Dr. Ramesh Joshi (NCL)** for their great help in preparing this book.

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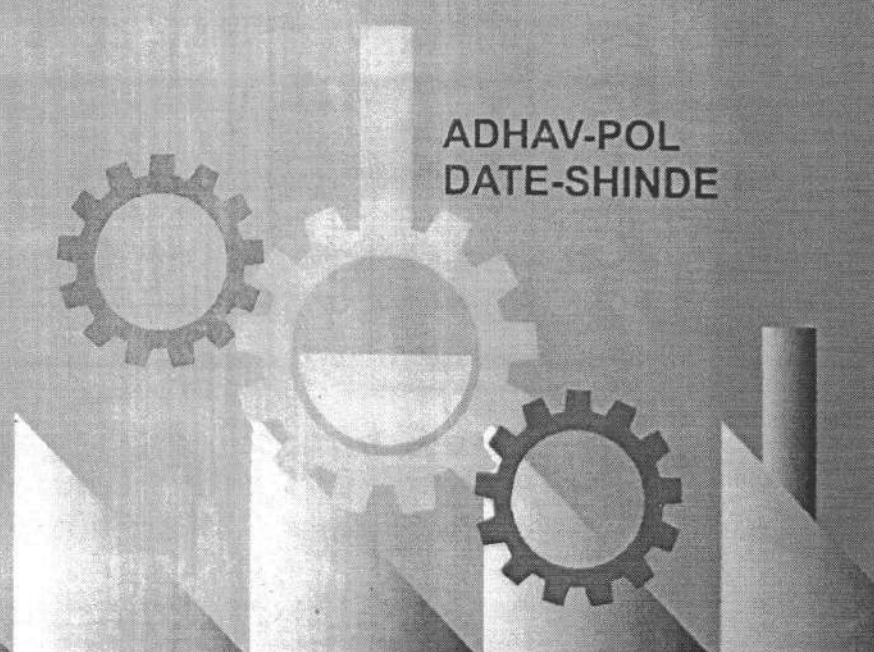
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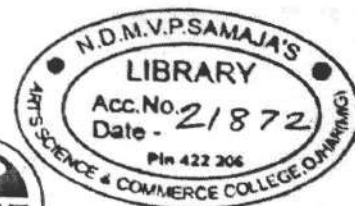
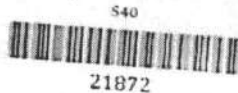
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