

New Syllabus
PUNJABI UNIVERSITY



VINESH

A Text Book of
Algebra-I

B.A./B.Sc. Semester-II

Ishtwari Kumar



Handwritten mathematical notes on a chalkboard. At the top, a trigonometric identity is written: $\cos(A+B) = \cos A \cos B - \sin A \sin B$. Below this, a specific example is shown: $\cos 75^\circ = \cos(45^\circ + 30^\circ) = \cos 45^\circ \cos 30^\circ - \sin 45^\circ \sin 30^\circ$. The calculation continues: $= \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{3}}{2} - \frac{1}{\sqrt{2}} \cdot \frac{1}{2} = \frac{\sqrt{3} - 1}{2\sqrt{2}}$. A small white rectangular box is placed over the middle of the calculation. At the bottom, the number '29' is written, followed by $\sqrt{2} \sin^2 A$.

A photograph of a hand-drawn diagram on a chalkboard. It shows a circle with a vertical diameter and a horizontal chord. A right-angled triangle is formed by the radius, the chord, and the vertical diameter. The angle at the center is labeled 'A'. The diagram is used to illustrate trigonometric relationships in a circle.

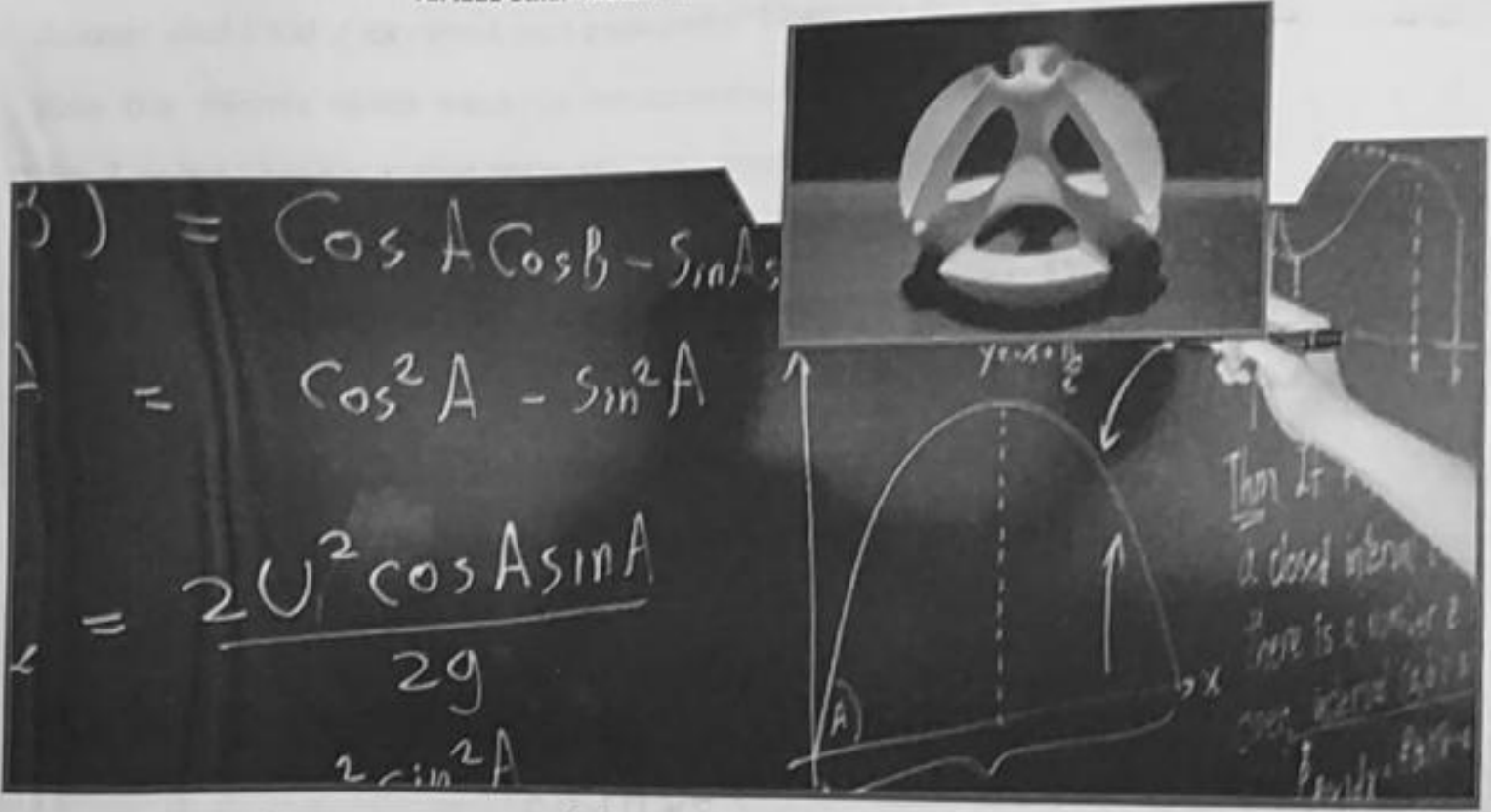
**New Syllabus
PUNJABI UNIVERSITY**

S.U.S. Govt. College
SUNAM
Acc. No. 29966
Library

VINESH

A Text Book of **Algebra-I**

For the Students of B.A./B.Sc. Semester-II of Punjabi University, Patiala and various other Indian Universities as per new Syllabus



Ashwani Kumar

(M.Sc Net U.G.C.)
Head, Department of Mathematics,
S.U.S Government College, Sunam

2019



S. VINESH & Co.

Price { ₹ 220/-

Sister Concern :

S. DINESH & Co.

since 1982

• JALANDHAR • DELHI • BENGALURU • COCHIN • RANCHI

The present book is a culmination of very honest and sincere efforts, keeping in mind the level and aspirations of Mathematics Students at the graduation level.

I have minutely scanned the whole manuscript of **Algebra – I** and edited wherever necessary. Many observations out of my own long year of classroom teaching experience regarding the difficulties of students have been kept in my mind while presenting and editing the subject matter.

I have not changed Mathematics (no body can), but I have certainly changed the style of its presentation to make things simpler and easily understandable to our students , for whom the book has been written. Surely, my esteemed friends while patronizing this book for their classroom instruction, will also enjoy it. I honestly feel everyone will find the book refreshingly , different and acceptable.

We express our sincere thanks to our publishers Sh. Shri Paul Jain and Sh. Vinesh Jain for taking keen interest in the publication of this book.

U.S. Govt Library
SUNAM

—Author

Accession No. 29966

Date of 22/1/2019

Supplier M/s S. Dinesh & Co.

Price Rs. 220/-

Printing History

1st Edition : Jan., 2019

© Reserved with the Publishers & Authors

Published by : Vinesh Jain, S. Vinesh & Co., Near Sitala Mandir, Circular Road, Mai Hiran Gate, Jalandhar-144008
Ph.: 0181-4606108, 09, 11, 7710711711

Printed at : Convenient Printers, Mubarkpur Sheikh, Jalandhar

**Our Distinguished books as per new Pbi. U. Syllabus
For B.A./B.Sc. Classes (Semester-I & II)**

CHEMISTRY

- ➔ Inorganic Chemistry
- ➔ Organic Chemistry
- ➔ Physical Chemistry
- ➔ Practical Chemistry
- ➔ Inorganic Chemistry
- ➔ Organic Chemistry
- ➔ Physical Chemistry
- ➔ Practical Chemistry

For Sem. I
For Sem. I
For Sem. I
For Sem. I
For Sem. II
For Sem. II
For Sem. II
For Sem. II

***MATHEMATICS**

- ➔ Differential Equations
- ➔ Calculus-I
- ➔ Co-ordinate Geometry
- ➔ Partial Differential Equations
- ➔ Algebra-I
- ➔ Analytic Geometry

For Sem. I
For Sem. I
For Sem. I
For Sem. II
For Sem. II
For Sem. II

Vinesh Excellent Series (Fully Solved) for all books in Mathematics are also available.

***PHYSICS**

- ➔ Mechanics-I
- ➔ Vibrations and Waves-I
- ➔ Electricity and Magnetism-I
- ➔ Practical Physics
- ➔ Mechanics-II
- ➔ Vibrations and Waves-II
- ➔ Electricity and Magnetism-II
- ➔ Practical Physics

For Sem. I
For Sem. I
For Sem. I
For Sem. I
For Sem. II
For Sem. II
For Sem. II
For Sem. II

* Published under the banner 'S. VINESH & Co.'

S. VINESH & Co.

Sister Concern |

S. DINESH & Co.

since 1982

JALANDHAR · DELHI · BANGALORE · COCHIN · RANCHI

An ISO 9001 : 2015 Certified Company

I.S.B.N. 978-83-87959-89-7



9 789387 959897