

## Vedic Mathematics

Time: 3Hours

Credits:3:0:0

Max.Marks:80

### Course Objectives:

1. To understand the concepts of Number system and their applications in Vedic Mathematics.
2. To be familiar with Multiplication using base and Sub-base Method.
3. To learn about Cube using Nikhilam and Anurupyena Sutra, Division using Dhvajank Method.
4. To understand the concept of Simultaneous simple equations, equation of the line passing through the points using Vedic methods.

**Note :** The questions paper will consist of **five** Sections. Each of the first four units will contain two questions from Section **I, II, III, IV** respectively and the students shall be asked to attempt one question from each Section. Section five will contain **eight to ten** short answer type questions without any internal choice covering the entire syllabus and shall be **compulsory**.

### Unit-I

Introduction to Vedic Mathematics, History of Vedic Mathematics, Number system and their applications in Vedic Mathematics, Multiplication of any number by numbers containing digit 1 only, Multiplication of any number by numbers containing digit 9 only, Multiplication any numbers Using Sutra- Urdhvatiyagbhyam.

### Unit-II

Multiplication using base and Sub-base Method, Multiplication using Ekadhikena Sutra, Sum & Difference of Products, Square using Nikhilam Sutra, Square using Duplex Method, Sum and Difference of Squared numbers.

### Unit-III

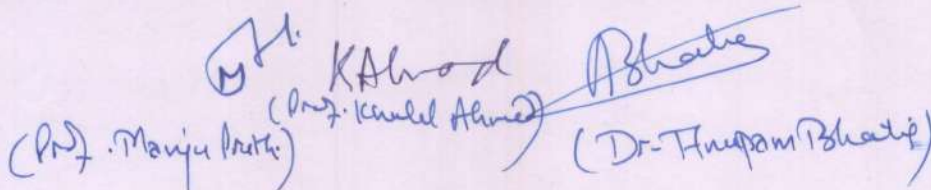
Sum and difference of squared and products numbers, Cube using Nikhilam and Anurupyena Sutra, Division using Dhvajank Method, Square root and cube root, Algebraic Multiplication.

### Unit-IV

Sum and difference of algebraic products, Square and square root of algebraic expressions, Simultaneous simple equations, equation of the line passing through the points using Vedic methods, Highest common factor using Vedic sutras, Simultaneous Quadratic Equations, Partial Fractions.

### Books Recommended:

1. Sri Bharati KrsnaTirthaji, "Vedic Mathematics", published by Motilal Banarsidass, 1965. ISBN 81-208-0163-6.
2. Williams K.R. "Discover Vedic Mathematics." Vedic Mathematics Research Group, 1984. ISBN 1-869932-01-3
3. Williams K.R. and M. Gaskell "The Cosmic Calculator". MotilalBanarsidass, 2002. ISBN 81-208-1871-7.
4. Nicholas A.P., Williams, J. Pickles. "Vertically and Crosswise". Inspiration Books, 1984. ISBN 1-902517-03-2.

  
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