

VALUE ADDED COURSE

Swarnim Institute of Technology

Course Code: VACVMII

Year: 2022-23

Semester:- Even

Subject: Vedic Mathematics - II

Program:	Bachelor of Engineering	Branch:	All
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Hours:- 30 hrs.

Objective:-

- Foster the love for mathematics by creating a positive attitude through Vedic and Ancient Indian Mathematics
- Help students appreciate ancient Indian Mathematics and its contribution to the world.
- Enhance computational proficiency by involving procedures in Linear and Matrix Algebra
- Improve geometrical thinking by understanding the basic tenets of geometry such as Construction of line segments, angles, triangles and circles as used in Ancient India
- Develop conceptual knowledge of mathematical concepts
- Appreciate the need of conceptual knowledge over procedural processes

Detail Syllabus

Sr.	Content	Total Hrs
1	Contribution of Indian Mathematicians Varahmihir, Brahmagupta, Srinivasa Ramanujan, Neelkanth Somayya, Bharti Krishna Tirtha	4
2	Easy Solution of linear equations Introduction of simple equation, Solutions of simple equations, Solutions of linear equations in two variables, Practical application of linear equations in two variables	5
3	High Speed Matrix Algebra Introduction and history of Matrices and Determinants, Matrices and Determinants of third order, Inverse of Matrices	6
4	Vedic Geometry Different forms of straight lines, The Triangle, The Cyclic Quadrilateral, Squares, and the Circle, Geometrical constructions (such as Altars), Transformation of simple shapes, Kalpa Sutras-Srautha Sutras and Sulbha Sutras	7

List of Practical:

Sr.	List of Practical	Teaching Hours
1	Conduct workshops under the supervision of the course teacher to spread awareness on the utility of Vedic Mathematics.	02
2	Students may share their experience with the class teacher in the form of audio-video presentations of 15 minutes.	02
3	If required, students can share their experiences in the form of a Project Report.	02
4	. Any other Practical/Practice as decided from time to time	02

Reference Books:

Sr. No.	Author/s	Name of the Book	Publisher
1	Tiwari P.	Vedic Mathematics - Modern Research Methods	Campus Books International
2	T S Bhanumurthy	A Modern Introduction to Ancient Indian Mathematics	Wiley Eastern Limited, New Delhi

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