



**CS-07: Mathematics in Ancient India: Exploring the Rich Heritage of Vedic Mathematics**

**Objectives:**

- Helps students understand the contributions made by ancient civilizations to the field of mathematics.
- Ancient mathematics helps to establish connections between past and present mathematical ideas.
- Exploring Mathematical concepts.

**Prerequisites:**

- Eagerness to know rich heritage of Indian Mathematics.

Unit No.	Topic	Details
1	<b>Biographies of Ancient Indian Mathematicians</b>	<ul style="list-style-type: none"> <li>• A brief introduction to the lives and information on the works of the following mathematicians: Aryabhata, Varahmihira, Brahmagupta, Bhaskara I &amp; II</li> </ul>
2	<b>Biographies of Remarkable Indian Mathematicians</b>	<ul style="list-style-type: none"> <li>• A brief introduction to the lives and information on the works of the following mathematicians: Shrinivasa Ramanujan, C. R. Rao, P. C. Mahalanobis, D. R. Kaprekar, Satyendranath Bose, Shakuntala Devi</li> </ul>
3	<b>Vedic Mathematics and Mathematics</b>	<ul style="list-style-type: none"> <li>• Overview of Vedic Mathematics and its historical background.</li> <li>• Introduction to the 16 Sutras and 13 Upa-Sutras used in Vedic Mathematics.</li> <li>• Use of Vedic Mathematics</li> <li>• Importance of Vedic Mathematics</li> </ul>

**Course Outcome:**

- Student will know the Mathematical advancements of Ancient India.
- Student will gain a deeper understanding of the historical development of mathematics in ancient civilizations.
- Enhance their problem-solving skills and discovering the connections between ancient mathematical ideas and modern mathematical concepts.

**Reference Books:**

- The History of Ancient Indian Mathematics. The World Press Private Ltd. Calcutta. Digitized Book (2009) - Srinivasiengar, C. N. (1988).
- "Vedic Mathematics" by Swami Bharati Krishna Tirtha