**DEPARTMENT OF MATHEMATICS**

**SREE KRISHNA COLLEGE, GURUVAYUR**

# MATHEMATICS MASTERY PROGRAM (MMP)

## CERSKCMAT001/24

## A Certificate Course on Competitive Mathematical Techniques

### COURSE OBJECTIVE

- **Title of the program** : **MATHEMATICS MASTERY PROGRAM(MMP)**
- **Eligibility for admission** : Undergraduate students from various departments of Sree Krishna College having interest in Problem solving and Reasoning
- **Duration of the program** **:** 30 hours
- **Medium of instruction** : English
- **Student assessment plan** : The result of assignments and examination are used to evaluate students.

  Passing requires scores on the exam with a maximum of 30 and a minimum of 12 and marks on the assignments with a maximum of 20 and a minimum of 8.

### COURSE OUTCOME

To equip students with advanced problem-solving techniques, time management strategies, and a deep understanding of mathematical concepts to excel in competitive exam

- Learn various techniques and formulas for solving mathematical problems.
- Understand the fundamental concepts of quantitative aptitude, data interpretation and logical reasoning.
- Enhance your critical thinking and analytical skills.
- Build confidence in students' ability to solve mathematical problems and interpret data.

**SYLLABUS**

**Module 1: Arithmetic and Commercial Mathematics (8 hours)**

**1.1 Percentage:**

Basic concepts, percentage change, profit and loss, discount, simple and compound interest.

**1.2 Ratio and Proportion:**

Ratios, proportions, variations, partnerships.

**1.3 Averages and Mixtures:**

Averages, weighted averages, mixtures and allegations.

**Module 2: Data Interpretation and Logical Reasoning (8 hours)**

**2.1 Data Interpretation:**

Tables, bar graphs, line graphs, pie charts.

**2.2 Logical Reasoning:**

Number series, letter series, coding-decoding, blood relations, directions, syllogisms, puzzles.

**Module 3: Physical Problems (8 hours)**

**3.1 Time, speed, and distance**

Time, speed, and distance problems.

**3.2 Time and work**

Time and work problems.

**Module 4 : Arithmetic(6 hours)**

**4.1 Number System:**

Number theory, divisibility rules, prime numbers, HCF, LCM.

**MAJOR REFERENCES**

- **QUANTITATIVE APTITUDE** by R.S Aggarwal
- **DATA INTERPRETATION** by Arun Sharma
- **OBJECTIVE ARITHMETIC** by Rajesh Verma
- **LOGICAL REASONING** by Arihant Publications