

FACULTY OF SCIENCE**DEPARTMENT OF MATHEMATICS****SMATVAC01 Mathematics for Competitive Examinations****Learning Objective**

To introduce concepts of mathematics with emphasis on analytical ability and computational skill needed in competitive examinations.

Course Outcome

- By the end of the course, students will be able to face the Mathematics part of competitive examinations easily.

Unit I Problems on General Arithmetic

Problems of ages – Ratio and proportions -Inverse ratio-properties (Addendo, subtrahendo, componendo & dividendo) -ratio of four numbers -increasing and decreasing order of fractions.

Unit II

Percentages - Gain and loss percent's - Partnership problems.

Unit III Time, Distance and Work

Time and work – Time and distance.

Unit IV Commercial Arithmetic

Simple interest - Compound interest – Stocks and Shares.

Unit V Data Interpretation

Tabulation – Bar graphs and Pie charts – Line Graphs.

Text Book:

R.S. Agarwal, Content and treatment as in the book Quantitative Aptitude, S. Chand & Co, New Delhi, 2015.

Unit – I Sections 1.8 and 1.12

Unit – II Sections 1.10, 1.11 and 1.13

Unit – III Sections 1.15 and 1.17

Unit – IV Sections 1.21, 1.22 and 1.29

Unit – V Sections 2.36 to 2.38

Supplementary Readings:

Abhijit Guha, *Quantitative Aptitude for Competitive Examinations* IV Edition,
Tata McGraw Hill Pub. Co. Ltd. New Delhi, 2011.

Edgar Thorpe, *Course in Mental Abilities and Quantitative Aptitude for
Competitive Examinations*, II Edition, Tata McGraw Hill Pub. Co. Ltd.
New Delhi, 2008.

RSN Pillai and A. Bagavathi, *Statistic*, S. 7th Revised Edition, Chand and
Co., 2008.