

Open Elective Course

(For students of other than Science stream)

MATOET 3.1(B): Quantitative Mathematics

Teaching Hours : 3 Hours/Week	Credits: 3
Total Teaching Hours: 42 Hours	Max. Marks: 100 (SEE - 60 + IA - 40)

Course Outcomes: This course will enable the students to:

- Understand number system and fundamental operations
- Understand the concept of linear, quadratic and simultaneous equations and their applications in real life problems
- Understand and solve the problems based on Age.
- Solve Speed and Distance related problems.

Unit-I: Number System

Numbers, Operations on Numbers, Tests on Divisibility, HCF and LCM of numbers. Decimal Fractions, Simplification, Square roots and Cube roots - Problems thereon. Surds and Indices. Illustrations there on.

14 Hrs

Unit-II: Theory of equations

Linear equations, quadratic equations, simultaneous equations in two variables, simple application problems - Problems on age calculations.

14Hrs

Unit-III: Quantitative Aptitude

Percentage, Average, Average Speed-problems. Time and distance, problems based on trains, problems on-work and time, work and wages, clock and calendar.

14 Hrs

Reference Books:

1. R.S. Aggarwal, *Quantitative Aptitude*, S. Chand and Company Limited, NewDelhi-110 055, 2010.
2. Abhijit Guha, *Quantitative Aptitude*, 5th Edition, Mc.Grawhill publications, 2014.
3. R V Praveen, *Quantitative Aptitude and Reasoning*, PHI publishers, 2016.
4. R S Aggarwal, *Objective Arithmetic*, S. Chand & Company Ltd., 2022.
5. Qazi Zameerddin, Vijay K Khanna, S K Bhambri, *Business Mathematics-II Edition*, vikas publication, 2009.
6. S. K. Sharma and Gurmeet Kaur, *Business Mathematics*, Sultan Chand & Sons, 2019.
7. Hazarika Padmalochan, *A Text Book of Business mathematics for B.Com and BBA Course*, Chand Publication, 2017.
8. J K Thukrol, *Business Mathematics*, abci book: 2020 First Edition, 2020.
9. N. G. Das and J. K. Das, *Business Mathematics and Statics*, Mc Graw Hill Education, 2017