

Quantitative Aptitude and Analytical Attitude

Course Objective:

Quantitative Aptitude (QA) is one of the most basic and essential requirements while entering the professional as well as the higher-academic world. Right from selection (or rejection) tests to recruitments in the professional world, QA is presented as the necessary pre-requisite. Generally, students tend to start preparing for QA towards the end of their graduation or a few, even later. If they understand the importance of QA, not only in seeking admissions and jobs but also in developing analytical abilities before they reach the end of their graduation, they would enjoy much better chances of succeeding in 'selection' tests and would develop a better analytical attitude.

Against this backdrop, the course proposes to proceed with the following **objectives**:

- To discuss the meaning and importance of QA.
- To teach methods and techniques of QA.
- To provide practice of solving mathematical and analytical problems and puzzles.
- To develop their confidence to a level of comfort in handling typical tests of QA.

Course Outline

The course will cover some of the most important topics in general arithmetic and algebra that are considered the most essential aspects of QA. These are:

- Number Operations
- Averages, HCF and LCM
- Percentage, Profit-loss, Interest
- Ratio and Proportion
- Speed, Time, Work and Wages (Railways and Steamers)
- Mixtures and Amalgams
- Basic Algebra, Equations
- Basic Geometry
- Data Analysis
- Data Sufficiency
- Puzzles
- Logic and Analytical Reasoning
- Permutation, Combination and Probability (if time permits)

Method of Assessment:

The nature and demand of the course is such that solving unseen problems is the most important part. So the assessment would contain:

1. Home assignments where students will solve given set of problems in groups and individually.
2. Class tests where a fixed number of problems are required to be solved in a fixed time duration, individually.
3. Seminars where students will have to 'teach' a pre-decided topic or solve some problems for their colleagues.

The distribution of 100 points is tentatively:

Home Assignments (Individual) –	20 points
Home Assignments (Group) –	20 points
Class Tests (Individual) –	40 points
Seminar / Presentation (Individual) –	10 points
Meaningful Attendance –	10 points

Total	100 points

Note:

At the beginning of the course, this scheme of assessment will be discussed and finalized. Also, the time-allotment for each topic will be decided depending on the students' familiarity with the topics.
