

Part III, SEC-II: Cocurricular Course
Coordinating Department: Department of Chemistry
 (From AY 2016-17 onwards)

	Quantitative Aptitude & Reasoning for Government & Bank Competitive Exams	160 hrs
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Unit.1 General Fundamentals of Mathematics for Competitive Exams (15 hrs.)

Divisibility Test, Simplification, Division algorithm, unit digit in given number, cube root, cube, square root, square, relations of number, introduction to vedic mathematic techniques.

Unit.2 Arithmetic: (65 hrs.)

HCF & LCM, Average, Percentage, Ratio & Proportion, Profit Loss & Discount, Partnership & Mixture, Simple & Compound Interest, Time Work & Distance, Area, Volume

Unit.3 Algebra: (20 hrs.)

Permutation & Combination, Probability, Coordinate Geometry, Linear equation, Quadratic equation, Factorization, Polynomials

Unit.4 Trigonometry & Geometry: (25 hrs.)

A. Trigonometry: Trigonometric Ratio and Identities, Trigonometric Functions & their Properties, Height and Distance,

B. Geometry: Angles & sides related properties, Theorems of Geometry, Properties of triangles, Similarity & Congruence related Postulates

Unit.5 Reasoning: (35 hrs.)

A. Verbal Reasoning : Alphabet, Series, Analogy, Classification, Coding/Decoding, Blood relationship, Symbols & Notations, Distance & Direction, Ranking/ Arrangement, Input, Syllogism, Problem solving, Cause & Effect, Assumption, Conclusions/ Inferences, Courses of Action. Data sufficiency, Data Analysis and Miscellaneous

B. Non - Verbal Reasoning : Series, Analogy, Classification and Miscellaneous

Practical: Practice Session & Weekly Multiple objective test of 25 marks

Books Recommended:

1. Quantitative aptitude by Agrawal R. S. , Publishers: S. Chand & Co., New Delhi
2. Objective Arithmetic by Rajesh Verma, Publishers: Arihant Publications (India) Ltd. , New Delhi

3. Quickwer Maths by M. Tyra, Publishers: BSC Publishing Co. Pvt. Ltd., Delhi
4. Analytical Reasoning by M K Pandey, Publishers: BSC Publishing Co. Pvt. Ltd., Delhi
5. Reasoning by Agrawal R. S , Publishers:Kiran Publication, New delhi.
6. Reasoning, Verbal, Non verbal & Analytical by B S Sijwali & Indu Sijwali Publishers: Arihant Publications (India) Ltd. , New Delhi

Evaluation Norms: 100% CIE

100% CIE Components

S.N	Component	Content	Duration	Marks	Sub Total
1	Attendance	Theory: Min. 80%	For full 160 hrs course	10	10
		Practice Session & Weekly multiple objective Test: At least 75%			
2	Unit Test	Total 5 unit tests (at the end of each unit)	1 hour each	each 6 (set for 30)	30
3	Assignment	Number decided by coordinator	-	10	10
4	Test	Full syllabus at the end of the course	3 hour	50	50
Total					100

Guidelines for evaluations:

- Only remarks will be given at the end of the course
- A separate certificate on completion of the each course will be issued by the CoE
- All above are compulsory components
- In an event of non-completion of the course, the student has to re-do the course or opt for another one.

At the end of the course no marks be given, only remarks be given as follows:

Range of Marks	Remarks
90-100	Excellent
75-89	Very Good
60-74	Good
40-59	Fair
39 and below	Not completed