

Quantitative & Verbal Aptitude - I (Common for all Branches)	
Code:	Credits: 2
Instruction: 4 Periods/Week (2QA + 2VA)	Sessional Marks -100

Course objectives:

Quantitative Aptitude -I

1. To prepare the students on various principles related to numerical computations.
2. To explain concepts related to numerical estimation.
3. To illustrate and explain the fundamentals related to geometry and mensuration.

Verbal Aptitude-I:

4. To categorize and explain principles of grammar in order to minimize errors in English.
5. To list and quote high frequency words by giving relevant examples.
6. To categorize, apply and use data as per the requirement.
7. To construct and make use of idioms, phrasal verbs and other expressions used in professional contexts.
8. To critically evaluate reading material for better comprehension

Course Outcomes:

Quantitative Aptitude –I

The student will be able to	
1	Solve problems related to numerical computations in company specific and other competitive tests.
2	Able to recall and use the concepts to solve problems numerical estimation with respect to company specific and competitive tests.
3	Apply basic principles related to geometry and mensuration & solve questions in company specific and competitive tests.

Verbal Aptitude-I:

The student will be able to	
1	Detect grammatical errors in the text/sentences and rectify them while answering their competitive/ company specific tests and frame grammatically correct sentences while writing.
2	Answer questions on synonyms, antonyms, hyponyms, hypernyms and other vocabulary based exercises while attempting company specific and other competitive tests.
3	Use their logical thinking ability and solve questions related to reasoning based exercises.
4	Choose the appropriate word/s/phrases suitable to the given context in order to make the sentence/paragraph coherent.
5	Analyze the given data/text and find out the correct responses to the questions asked based on the reading exercises; identify relationships or patterns within groups of words or sentences.

Mapping of Course Outcomes with Program outcomes:

CO	PO												PSO			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
QA	1															
	2															
	3															
VA	4															
	5															
	6															
	7															
	8															

SYLLABUS**Section –A (Quantitative Aptitude –I)****UNIT I****6 Periods****Numerical computation:**

Applications based on Numbers, Chain Rule, Ratio Proportion

UNIT II**6 Periods****Numerical estimation - I****Applications Based on** Time and work, Time and Distance**UNIT III****4 Periods****Numerical estimation – II**Applications based on Percentages, Profit Loss and Discount, Simple interest and Compound Interest
Partnerships, Shares and dividends

UNIT IV

4 Periods

Data interpretation

Data interpretation related to Averages, Mixtures and allegations, Bar charts, Pie charts, Venn diagrams

UNIT V

4 Periods

Application to industry in Geometry and Mensuration

Books for practice

1. Quantitative aptitude by RS Agarwal, S Chand Publications
2. Verbal and non verbal Reasoning by RS Agarwal from S Chand publications

References

1. Barron's by Sharon Welner Green and Ira K Wolf (Galgotia Publications pvt. Ltd.)
2. Quantitative Aptitude by U Mohan Rao Scitech publications
3. Quantitative Aptitude by Arun Sharma McGrawhill publications
4. Quantitative Aptitude by Ananta Asisha Arihant publications
5. Quantitative Aptitude by Abhijit Guha
6. Quantitative Aptitude by Pearson publications
7. Material from 'IMS, Career Launcher and Time' institutes for competitive exams.
8. Elementary and Higher algebra by HS Hall and SR knight.

Websites:

1. www.m4maths.com
2. www.Indiabix.com
3. 800score
4. Official GRE site
5. Official GMAT site

Section –B (Verbal Aptitude –I)

UNIT I

7 Periods

Grammar:

Parts of speech(with emphasis on appropriate prepositions, co-relative conjunctions, pronouns-number and person, relative pronouns), articles(nuances while using definite and indefinite articles), tenses(with emphasis on appropriate usage according to the situation), subject – verb agreement (to differentiate between number and person) , clauses (use of the appropriate clause , conditional clauses), phrases(use of the phrases, phrasal verbs), degrees of comparison(comparing apples and oranges, comparison and number), modifiers(misplaced and dangling modifiers, absence of modifiers), determiners, parallelism in structure(symmetry in two part sentences), word order, subjunctive mood, redundancy, special types of sentences, miscellaneous types, identifying errors in a given sentence, correcting errors in sentences.

UNIT II

4 Periods

Vocabulary:

Synonyms and synonym variants (with emphasis on high frequency words), antonyms and antonym variants (with emphasis on high frequency words), homonyms, hyponyms, hypernyms and General idioms.

UNIT III

5 Periods

Reasoning:

Critical reasoning (understanding the terminology used in CR- premise, assumption, inference, conclusion), Sequencing of sentences (to form a coherent paragraph, to construct a meaningful and grammatically correct sentence using the jumbled text), to use logical reasoning and eliminate the unrelated word from a group.

UNIT IV

4 Periods

Usage:

Sentence completion (with emphasis on signpost words and structure of a sentence), contextual meanings (to use the appropriate word according to the situation), supplying a suitable beginning/ending/middle sentence to make the paragraph coherent, idiomatic language (with emphasis on business communication), punctuation depending on the meaning of the sentence, run on errors, sentence fragments, comma splices.

UNIT V

4 Periods

Reading Comprehension:

Types of passages (to understand the nature of the passage), types of questions (with emphasis on inferential and analytical questions), style and tone (to comprehend the author's intention of writing a passage), strategies for quick and active reading (importance given to skimming, scanning), summarizing, reading between the lines, reading beyond the lines, techniques for answering questions related to vocabulary (with emphasis on the context), supplying suitable titles to the passage, identifying the theme and central idea of the given passages.

Books for Practice

1. Practical English Grammar A. J. Thomson, A. V. Martinet by Oxford University press
2. Remedial English Grammar for Foreign Students by FT wood published by Macmillan Publishers
3. Objective English-Edgar Torpe, Showick Thorpe-Pearson Education

Reference Books and websites:

1. Barron's by Sharon Welner Green and Ira K Wolf (Galgotia Publications Pvt.Ltd.)
2. Websites: Indiabix, 800 score, official CAT, GRE and GMAT sites
3. Material from 'IMS, Career Launcher and Time' institutes for competitive exams.
4. R S Agarwal's books on Objective English and Verbal Reasoning from S Chand Publications.
5. Cambridge and Oxford Dictionaries
6. Collins Cobuild English Grammar by Goyal Publishers
7. Word Power Made Easy by Norman Lewis-Goyal Publishers