



Anil Neerukonda Institute of Technology & Sciences (Autonomous)

(Affiliated to AU, Approved by AICTE & Accredited by NBA & NAAC with 'A' Grade)

Sangivalasa-531 162, Bheemunipatnam Mandal, Visakhapatnam District

Phone: 08933-225083/84/87

Fax: 226395

Website: www.anits.edu.in

email: principal@anits.edu.in

Quantitative Aptitude I

3/4 B. Tech, Semester 1

Course Objectives:

- To categorize, apply and use thought process to distinguish between concepts of Quantitative methods.
- To prepare and explain the fundamentals related to various possibilities and probabilities related to quantitative aptitude.
- To critically evaluate numerous possibilities related to puzzles.

Course Outcomes:

The student will be able to

- Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests.
- Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.
- Understand and solve puzzle related questions from specific and other competitive tests

UNIT I

6 Periods

Numerical computation:

Applications based on Numbers, Chain Rule, Ratio Proportion, Averages, remainders theorem, Ages

UNIT II

6 Periods

Numerical estimation - I

Applications Based on Time and work, Time and Distance, pipes & Boats

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 & Analysis

Data interpretation related to Averages, percentage, Ratios, Mixtures and allegations, Bar charts, Pie charts.

UNIT V

4 Periods

Application to industry in Geometry and Mensuration -2D & 3D, concept of Crypt arithmetic

Books for practice

1. Quantitative aptitude by R S 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

SOFT SKILLS

3/4 B. Tech, Semester 1

COURSE OBJECTIVES

- To inculcate effective communication skills with appropriate body language.
- To produce potent leaders, productive team players and effective individuals with proper professional ethics.
- To enable students to make successful oral presentations using relevant content.
- To train students for Group discussions and job Interviews which improves their employability skills.
- To make the students understand the importance of setting realistic goals and achieving them using time management techniques.

COURSE OUTCOMES

At the end of the course, students will be able to:	
1	Comprehend the core engineering subjects using effective verbal and nonverbal communication skills and present spontaneously on the subjects.
2	Present accurate and relevant information efficiently on the given topics, using suitable material aids.
3	Participate in group discussions, present analytical perception on various issues with confidence.
4	Understand the different types of professional interviews and present with confidence the professional interviews.
5	Work effectively in teams, emerge as responsible leaders and able to set time bound goals.

SYLLABUS

UNIT-I: Effective Communication Skills

9 Periods CO1

Theory- Formal and informal expressions in business communication, Telephone etiquette, Just a minute(JAM) procedure, Extempore – Tips

LAB:

1. Definition of Communication, Effective Communication
2. Types of Communication
3. Barriers To Communication
4. Non-verbal Communication-Postures and gestures
5. Listening skills- types, analyzing videos and news.
6. Feedback Etiquette
7. Role Plays

Activities- Just a Minute (JAM) practice of different postures and gestures and activity on giving feedback and role plays listening news and reading Newspapers.

UNIT- II: Presentation Skills

9 Periods CO2

Theory: Elocution, analogies, YES-NO statements (sticking to a particular line of reasoning (sticking to a particular line of reasoning). Paragraph writing, supplying a suitable beginning/ending/middle sentence to make the paragraphs.

LAB:

1. Content, outline Structure and Packaging
2. Effective presentation strategies
3. Analysis of audience
4. Using audio –visual aids
5. Presenting with confidence
6. Professional grooming and Body language.

**Activities. -1.Group presentation by each team- Individual evaluation,
2. Paragraph writing tasks.**

UNIT- III: Group Discussions**9 Periods CO3**

Theory: Fact- inference-judgment (to identify statements as FIJ), General essay writing, writing issues and arguments, story writing.

LAB:

1. Introduction- as a part of selection process-guidelines for GD
2. Types of GD
3. Nature of topics of G.D
4. Roles to be played by participants in a GD
5. Evaluation process

**Activities–1.Group discussions and Individual evaluation
2. Essay writing assignments.**

UNIT- IV: Job- Interviews Skills**9 Periods CO4**

Theory: Resume writing-types, statement of purpose’, ‘letters of recommendation

LAB:

1. Different types of interviews (with emphasis on personal interview), Stress management
2. Self Esteem
3. Goal-Setting- setting- SMART goals
4. Decision making for a given situation
5. Frequently asked questions FAQ’s – (preparation for an interview)
6. E mail etiquette-Email format-dos and don’ts.

**Activities–1.Mock interviews evaluation,
2. Writing Resume, letters assignments.**

UNIT – V: Team Building, Leadership Skills and Attitude**9 Periods CO5**

Theory: Information Transfer-(IELTS) tables, bar diagrams, and pie charts) Book Review Assignments/Contests

LAB:

1. Importance of team work
2. Different stages of team formation
3. Good team vs. effective team, Team player and Team leader
4. Decision making and negotiating skills
5. Types of leadership
6. Importance of time-management- Prioritization, The art of saying ‘No’,
7. Identifying Time Wasters

Activities – 1.Graphs Interpretation evaluation, Time- Bound and team activities
2. Debates –Teams participation.

REFERENCE BOOKS:

1. Sanjay Kumar and Pushpalata, *Communication Skills*, Oxford University Press, 2011.
2. Allan Pease, *Body Language*, Sheldon Press, 1997.
3. John A. Kline and Bhavna Bhalla, *Speaking Effectively; Achieving Excellence in Presentations*, Pearson publication, 2013.
4. Marc Mancini, *Time Management*, Tata McGraw Hill publishing Comp.Ltd.2003.
5. Peter Veruki, *The 250 Job Interview Questions*, Adams Media Corporation Avon, Massachusetts, 1999.
6. Text Books: 1. Hurlock, E.B *Personality Development*, 28th Reprint. New Delhi: Tata McGraw Hill. 2006.
7. Stephen P. Robbins and Timothy A. Judge *Organizational Behavior* 16th Edition: Prentice Hall. 2014.
8. Covey, Stephen R. *The 7 Habits of Highly Effective People: Restoring the Character Ethic*. 2004.
9. Monipally M. “*Business Communication Strategies*” publisher : McGraw Hill Education (5 October 2001)

Quantitative Aptitude II
3/4 B. Tech, Semester II

Course Objectives:

<ul style="list-style-type: none">• To categorize, apply and use thought process to distinguish between concepts of reasoning
<ul style="list-style-type: none">• To prepare and explain the fundamentals related to various possibilities and probabilities related to quantitative aptitude.
<ul style="list-style-type: none">• To critically evaluate numerous possibilities related to puzzles.

Course Outcomes:

The student will be able to

<ul style="list-style-type: none">• Use their logical thinking and analytical abilities to solve reasoning questions from company specific and other competitive tests.
<ul style="list-style-type: none">• Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.
<ul style="list-style-type: none">• Understand and solve puzzle related questions from specific and other competitive tests.

UNIT I

8 Periods

Numerical Reasoning:

Problems related to Number series, Analogy of numbers, Letter series, Seating arrangements, Group Reasoning, Directions, blood relations and puzzle test (figures).

UNIT II

4 Periods

Modern Aptitude

Permutations, Combinations and Probability

UNIT III

4 Periods

Venn diagrams, Syllogisms & high level logical deductions based on syllogisms and data sufficiency

UNIT IV

4 Periods

Modern Reasoning :

Clocks (Base 24), Calendars (Base 7), Counting (figure) techniques, Ranking Test, Alphabet test

UNIT V

4 Periods

Puzzle Solving & Time Management using various problems solving tools and techniques:

Selective puzzles from previous year placement papers

Selective puzzles from book Puzzles to puzzle you by Shakunatala devi
Selective puzzles from book more puzzles by Shakunatala devi
Selective puzzles from book puzzles by George Summers

Pseudo code techniques for campus placement

Inserting of numbers (high level)

Books for practice

1. Quantitative aptitude by R S Agarwal, S Chand Publications
2. Verbal and nonverbal Reasoning by R S Agarwal, S Chand publications
3. Puzzles to puzzle you by Shakunatala devi orient paperback publication
4. More puzzles by Shakunatala devi orient paperback publication
5. Puzzles by George summers orient paperback publication.

References:

1. Barron's by Sharon Welner Green and Ira K Wolf (Galgotia Publications Pvt. Ltd.)
2. Material from 'IMS, Career Launcher and Time' institutes for competitive exams.
3. Reasoning by B S Sijwali Arihant publications
4. Reasoning Arun Sharma McGraw Hill publications

Websites:

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

VERBAL ABILITY
3/4 B. Tech, Semester II

Course objectives:

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

Course Outcomes:

At the end of the course, students 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.

VERBAL ABILITY

UNIT I

6 Hours

Parts of speech (appropriate application and usage of prepositions, co-relative conjunctions, pronouns- number and person, relative pronouns and degrees of comparison, articles (nuances while using definite and indefinite articles), tenses (appropriate application considering mood and aspect according to the situation), subject-verb agreement (to differentiate between number and person), clauses (use of the appropriate clause, conditional clauses)

UNIT II

6 Hours

Voice, direct & indirect speech, question tags, modifiers (misplaced and dangling modifiers, absence of modifiers), determiners, parallelism in structure (symmetry in two part sentences), word order, subjunctive mood, redundancy, signpost words, miscellaneous types, identifying errors in a given sentence, correcting errors in sentences, homonyms, hyponyms, hypernyms, frequently confused words, words often mis-used, words often mis-spelt

UNIT III

6 Hours

Synonyms and synonym variants (with emphasis on high frequency words), antonyms and antonym variants (with emphasis on high frequency words), phrases (use of the phrases, phrasal verbs), idiomatic language (with emphasis on business communication), foreign phrases, punctuation depending on the meaning of the sentence, run on errors, sentence fragments, coma splices

UNIT IV

6 Hours

Critical reasoning (understanding the terminology used in CR- premise, assumption, inference, conclusion), , fact- inference-judgment (FIJ), 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, contextual meanings (multiple meanings of the same word (differentiating between meanings with the help of the given context), one word substitutes

UNIT V

6 Hours

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. Intermediate English Grammar Raymond Murphy, Cambridge University Press,
2. Practical English Grammar A. J. Thomson, A. V. Martinet by Oxford University Press.
3. Remedial English Grammar for Foreign Students by FT wood published by Macmillan Publishers.

4. Objective English-Edgar Torpe, Showick Thorpe-Pearson Education.
5. Word Power Made Easy by Norman Lewis-Goyal Publishers.
6. RS Agarwal's books on Objective English and Verbal Reasoning from S Chand Publications.

Reference Books and websites:

1. Barron's by Sharon Welner Green and Ira K Wolf (Galgotia Publications Pvt.Ltd.)
2. Longman, Cambridge and Oxford Dictionaries
3. Collins Co-build English Grammar by Goyal Publishers
4. Websites: Bankers' Adda , India bix, 800 score, official CAT, GRE and GMAT sites
5. Practical English usage, Michael Swan, OUP 1995
6. Remedial English Grammar, F.T.Wood.Macmillan, 2007

Applications:

1. Longman Dictionary
2. British Council for Testing
3. The Hindu for Reading)