

STS1201	Introduction to Problem Solving	L	T	P	J	C
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Pre-requisite	None	Syllabus version				
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Course Objectives:						
<ul style="list-style-type: none">•To enhance the logical reasoning skills of the students and improve the problem-solving abilities•To strengthen the ability to solve quantitative aptitude problems•To enrich the verbal ability of the students for academic purpose						
Expected Course Outcome:						
<ul style="list-style-type: none">• Students will be introduced to basic concepts of Quantitative Aptitude, Logical reasoning and Verbal ability• Students will be able to read and demonstrate good comprehension of text in areas of the student’s interest• Students will be able to demonstrate the ability to resolve problems that occur in their field.						
STUDENT LEARNING OUTCOME(SLO):		5, 9, 10, 12 and 16				
Module:1	Lessons on excellence	2hours				
Skill introspection, Skill acquisition, consistent practice						
Module:2 Logical Reasoning 18 hours						
Thinking Skill <ul style="list-style-type: none">• Problem Solving• Critical Thinking• Lateral Thinking Taught through thought-provoking word and rebus puzzles, and word-link builder questions						
Coding & decoding, Series, Analogy, Odd man out and Visual reasoning <ul style="list-style-type: none">• Coding and Decoding• Series• Analogy• Odd Man Out• Visual Reasoning						
Sudoku puzzles						
Solving introductory to moderate level sudoku puzzles to boost logical thinking and comfort with numbers						
Attention to detail						
Picture and word driven Qs to develop attention to detail as a skill						
Module:3	Quantitative Aptitude	14 hours				

Speed Maths <ul style="list-style-type: none"> • Addition and Subtraction of bigger numbers • Square and square roots • Cubes and cube roots • Vedic maths techniques • Multiplication Shortcuts • Multiplication of 3 and higher digit numbers • Simplifications • Comparing fractions • Shortcuts to find HCF and LCM • Divisibility tests shortcuts 		
Algebra and functions		
Module:4	Recruitment Essentials	5hours
Looking at an engineering career through the prism of an effective resume <ul style="list-style-type: none"> • Importance of a resume - the footprint of a person's career achievements • How a resume looks like? • An effective resume vs. a poor resume: what skills you must build starting today and how? 		
Impression Management Getting it right for the interview: <ul style="list-style-type: none"> • Grooming, dressing • Body Language and other non-verbal signs • Displaying the right behaviour 		
Module:5	Verbal Ability	6hours
Grammar challenge A practice paper with sentence based and passage-based questions on grammar discussed. Topics covered in questions are Nouns and Pronouns, Verbs, Subject-Verb Agreement, Pronoun-Antecedent Agreement, Punctuations		
Verbal reasoning		
	Total Lecture hours:	45 hours
Mode of Evaluation: FAT, Assignments, 3 Assessments with Term End FAT (Computer Based Test)		
Text Book(s): <ol style="list-style-type: none"> 1. FACE, Aptipedia Aptitude Encyclopedia, 2016, 1st Edition, Wiley Publications, Delhi. 2. ETHNUS, Aptimithra, 2013, 1st Edition, McGraw-Hill Education Pvt.Ltd. 3. SMART, PlaceMentor, 2018, 1st Edition, Oxford University Press. 4. R S Aggarwal, Quantitative Aptitude For Competitive Examinations, 2017, 3rd Edition, 		

S. Chand Publishing, Delhi.			
Reference Book(s): Arun Sharma, Quantitative Aptitude, 2016, 7 th Edition, McGraw Hill Education Pvt. Ltd.			
Recommended by Board of Studies			
Approved by Academic Council	No. 53 rd AC	Date	13.12.2018